

Canadian Computer **Wholesaler**

THE MONTHLY FOR WHOLESALE RETAILERS

Volume 12 Number 1 No.8

LAB TEST: **LARGE MONITORS**
Buyers Want The BIG Pictures!

Comdex
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Wrap-Up!

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Computing With Barney?

The night was more than a little unusual when Microsoft Corp. vice-president Frank Clegg, amidst the expected Office 97 and Windows CE launches in his CondéNast/Canada booth address, suddenly pulled out a stuffed toy, and plugged it into his on-stage PC. (See our round-up on CondéNast/Canada, page 34.)

Then, Clegg covered the toy's eyes, and the little creature exclaimed: "It's dark in here!" Clegg removed his hand, and the fuzzy beast said: "Oh, there you are!" Quiet murmurs filled the auditorium, as people whispered: "Is that a joke? Is this for real?"

But indeed it's true. If Microsoft has its way, the next generation of computing accessories will include stuffed animals, ostensibly for the more youthful among the computing audience.

In this case, the toy was none other than that cuddly purple dinosaur everyone either loves to love, or loves to hate—Barney. While the creature has a certain amount of functionality in its stand-alone mode, it claims an impressive 14,000-word vocabulary when plugged into the computer. Microsoft's AmiMates Barney will work along with special CD-ROMs from Microsoft, with a stated goal to enhance a child's learning experience. Barney should be in stores by Christmas, with pricing starting at press time at something somewhere between \$125 to \$150.

This wasn't the only weird and fuzzy from Microsoft at CondéNast. The company took the opportunity to roll out (in a Canadian-only effort) an annual awards program for quality in software retailing—called the Microsoft Canada Goliath Awards for Leadership in the Art and Science of Software Retailing. Kudos go to Microsoft Canada for initiative, and a professional desire to raise the bar on software marketing in Canada. Microsoft says the award is meant to recognize software marketing in general, not specifically in regards to its own products, and a panel of judges will decide on next year's winners. The task now will be for Microsoft to get sufficient momentum behind the awards—not only to encourage nominations, but to make the prize sufficiently coveted that it will motivate retailers to greater efforts on the software marketing front. (For more

information, see <http://www.microsoft.com/retail/goliath.htm>)

Among the speakers at the black-tie gala event held to kick off the awards was John Terlik, an industry analyst with the J.C. Williams Group, of Toronto. He told the assembled audience: "The graveyard is filled with retailers who didn't keep pace with the changing consumer."

Whether a retailer wants to be the hottest, the biggest, or the easiest to get along with—you have to be best at something, he said.

He pointed to food retailer Loblaw's as an excellent example of a retailer that has combined service and self-service, and has raised its store brand President's Choice into direct competition with "name-brand" products. Part of its success, he said, comes from combining value with more elite-type offerings. "People want to shop on the basis, but splash on the shopping."

And today, he said that food (there is already thinking ahead about what may be next in retailing, such as robots, Internet shopping or smart cards)

From available parking to in-store decor, Terlik said customers need to feel a store is "sympathetic" to them. The store needs to provide a "constant round of value," to the customer even after a purchase—"satisfying you've made a good choice."

This issue, be sure to check out our update on the latest trends in retailing, in "What's In Store For Stores," page 24.

Also this issue, Associate Editor Jeff Evans does an in-depth examination of the latest trends, products and opportunities in networking. Please see, "Networking—The Market Is Now Everywhere," page 26. And Dan McLennan examines mouse and products in Point Of-Sale software, in "Point Of-Sale Targets Major Range Of Retailers," page 46.

According to Microsoft, Barney has been called the "Elmo of the pre school set." So, here's something to look forward to the demo model of AmiMates Barney is your stores this Christmas—singing one of his 17 songs, including the ever-popular "Head, Shoulders, Knees and Toes" and his signature hit— "I Love You."

Seasons greetings. —G

Grace Garrison
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Canadian Computer Wholesaler

is published 12 times a year by
Canadian Computer Paper Inc.

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Web Site: <http://www.wholesaler.ca>

Indicates application and change of address, sales tax to be made in writing to the new address.

New subscriptions are \$1000. Individuals, \$20 per year for annual qualified subscribers.

Claims of Canadian Computer Wholesaler should be made within 60 days of the date of publication. Subscriptions are sent to the subscriber's address as it appears on the bill sent with the magazine. No claims can be honored for issues lost due to subscriber's error.

Printed in Canada
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Complex age restriction flavoured

I recently was reading the latest issue of *CCTV* when I learned that Comtex placed a age restriction on its show. I can't understand why Comtex would do such a thing. What's the difference if there are a few people who are not "qualified to make a buying decision?"

The age limit used to be 16, however the Comex spokesperson says that (the show) wanted "no kids." Do you really believe that people at the age of 16 are still kids? In 10 years they could possibly be making some major purchasing decisions... however if they aren't allowed in now they could easily withdraw from the event when they have the chance to "make a business decision."

I hope the people who made the decision about the age rule get a talking to from their bosses.

Todd Mansfield
Owner, SystemByte Computers
Calgary
tmsystembyte@shaw.ca

Age policy is unfair

This is totally unfair that ComEd/Canada now has a policy that will bar attendees of less than 22 years.

I was 17 when I got my first CNE certificate. I passed with flying colors. I am recently employed by V-Com computers — one of the biggest computer retailer in Vancouver, BC. We mainly aim at corporate buyers. I repair and maintain networks for a few big companies — for example, the University of British Columbia, WIC Communications for BCTV, University of Victoria and Simon Fraser University.

Just because someone is the age of 17 shouldn't mean that they are not allowed to go to computer shows to learn more about their choice of career. I am 22 and I spend almost all Comdex shows for information.

Simon Wong
V-Care Tech Support
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INDUSTRY FLASH!

Hewlett-Packard outlines imaging strategy in NYC

In a New York presentation to customers and industry players, Hewlett-Packard Co. formally announced its "Internet Imaging Initiative" — bringing together a range of technologies, partnerships and strategies, and publicly committing to enhancing the quality and usefulness of images on-line.



HP's New York press conference

"It was more a statement of direction than anything else," commented Alan Gerard, publisher of *The Future Image* Airport, in Burlingame, Calif. He said the company is pushing the idea that however people may choose to connect to the Internet, they should be able to work with "high-quality photographic images."

According to HP, the joint effort will give consumers "more flexibility" in how they upload, download and manipulate images on their PCs. HP says users will also be able to

print images at home on photo-quality printers.

The initiative is built around the PhotoFax image file format and the Internet imaging protocol, said the company. Although the company didn't specifically detail planned technological enhancements, the stated goal of the initiative is to "address several problems in today's Web-based imaging, (including) delays in Internet image download, poor print quality of Web images, and lack of image detail available via the Internet."

Richard Bellanca, executive vice-president and general manager, for HP's Computer Organization, said, "Images have been important throughout history ofankind. Images play a central role in how people express themselves and communicate."

HP and PictureVision Inc. announced a plan to expand the functionality of PictureVision's PhotoNet — an imaging infrastructure that lets photo finishers offer customers the opportunity to view and share photographs on the Web.

HP and PhotoDisc Inc. (pending negotiation of a formal contract) say they will co-develop an on-line resource providing high-resolution digital images for use by small office and home office customers. "Our hope is that with this on-line resource, any business professional will be able to easily incorporate high-quality image material into both print and electronic projects on the fly," said Mark Torrance, CEO of Seattle-based PictureDisc, in a statement.

This fall, HP says it will launch the HP DeskJet 670TV printer — aimed at Internet appliances such as the WebTV, priced between US\$150 and US\$250. The idea, according to the company, is that WebTV users will be able to print E-mail, news, information, and coupons; for example, A HP technology called SmartFocus will enhance resolution.

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Apple Computer president GII Amelio resigns

On July 9, in a sudden departure that bodes ill for struggling Apple Computer Inc., Apple president and CEO Gil Amelio left the company, without a permanent successor having first been located. Apple co-founder Steve Jobs, who had recently rekindled a close connection with the company upon selling his NeXT operating system to Apple, is reported to be taking a more active role in product development and business relations, at least in the interim.

Amelio, who was promoted from Apple's board of directors to the CEO position in a would-be parable manner, succeeded in bringing about an impressive turnaround at troubled National Semiconductor Inc. prior to taking over Apple, 18 months ago. However, he was unable to work the same magic on the Cupertino, Calif.-based Macintosh computer maker. Apple has lost more than US\$3.6 billion in the last two years, with every recent quarter but one posting substantial losses. Speculation focused on the possible trigger for his sudden departure suggests a larger-than-expected loss for Apple's current quarter. The company's sales are estimated to have shrunk from US\$11.1 billion in 1995 to an expected US\$8.5 billion this year, and the Apple Mac's global market share has declined from around five per cent to a little over three per cent during the same period.

Amelio can be credited with taking a number of necessary short-term economy measures at Apple, such as laying off staff, cutting unprofitable products and reducing inventories, but it would seem that he failed to solve Apple's fundamental problems.



Legal battle won't threaten chip supply, DEC exec says

(Vancouver) — The patent dispute between Digital Equipment Corp. and Intel Corp. is mostly separate from the supplier-customer relationship between the two companies, and will not affect Digital's personal computer business, according to Jim Nolan, head of Digital's personal computer business in Canada.

At the Comdex/CanaCon trade show in Toronto, Nolan said that Digital has agreements in place with Intel that will prevent its access to Pentium chips from the company if Intel is charged with encroaching on chip technology that Digital developed for its Alpha processor. Digital's access to continued supplies of Intel chips has been in dispute with officials of Intel concerning Digital's assertions that contracts between the firms ensure a continued chip supply to Digital's personal computer unit.

"You're not pursuing Intel, no question about it," Nolan said. "But another level of the relationship is the supplier relationship." He mentioned that Digital also sells goods to Intel.

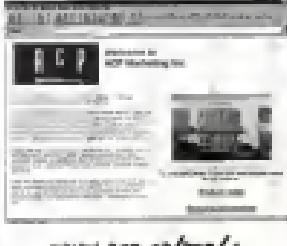


IBM unveils Network PC during Comdex/CanaCon tradeshow

Rodney Adams, the vice-president and general manager of client systems of the IBM Personal Computer Co. unveiled Big Blue's latest computing platform: a new generation of Network PC which promises to offer corporate customers full Windows multimedia computing capabilities while simplifying the management of networked PCs.

The new computer is basically a Windows PC in a slim "available" case, with a built-in network interface, and without a floppy drive or CD-drive. This model of computer can be connected to a network by simply connecting it to any free network cable, turning it on, and reporting a few lines of user information. The new user's information will appear on the network administrator's screen, and after verification, the computer is added to the network. By simplifying the network administrator's tasks, and allowing less opportunity for user-generated damage, the new Network PCs are hoped to offer savings in the order of 10 to 15 percent in initial costs, although the Network PC hardware will cost about the same as a regular PC, Adams says.

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Corel Computer targets the network

"Infinite bandwidth, total reliability and universally accepted standards," are the ideal conditions for the future of communications and computing, according to Ed Ed. präsident of Corel Computing Corp., a new division of Ottawa-based Corel Corp.

Although these conditions haven't been fully realized, recent developments have brought them "close enough" to reality to allow a new era in network computing to begin, according to Ed. Corel Computer

Corp. initiatives are in network computing clusters, server hardware and software, NCS and client software, video and audio communication products, and, network integration, involving Corel and third-party software products such as file and print services, E-mail collaboration, electronic forms and Java-based productivity software.

Corel Computer Corp. intends to roll out limited numbers of its new products, such as the Video Network Computer (VNC), by the end of 1997, and expects to see substantial sales in 1998, according to Ed. The VNC is a thin client device, based on a Strong ARM RISC processor, which is optimised for running software written in Java. It will also run Windows applications in an emulation mode. Corel sees the market for Network Computer systems, composed of servers, thin clients, and Java software, growing explosively from 1998 onwards, to the point where, in several years, NC sales may surpass PC sales, said Ed.

Samstack celebrates eight years

Samstack Computers, a major Canadian PC manufacturer and distributor, celebrated its eighth anniversary on June 13 with an open house attended by hundreds of Canadian computer industry professionals. In the last year had a half, according to Samstack marketing manager Robert Chau, the company has grown "phenomenally," posting over \$100 million in sales so far in 1997.

Samstack makes the Pixx PC and Samstack computer lines, which are sold through over 3,000 resellers across the country. In addition to finished PCs, Samstack also distributes multimedia components such as CD-ROM drives and sound cards, as well as hard drives and monitors. During the open house that was a part of the eighth anniversary celebrations, visitors were able to tour the assembly, quality control and distribution facilities in the main plant in Markham, Ont.

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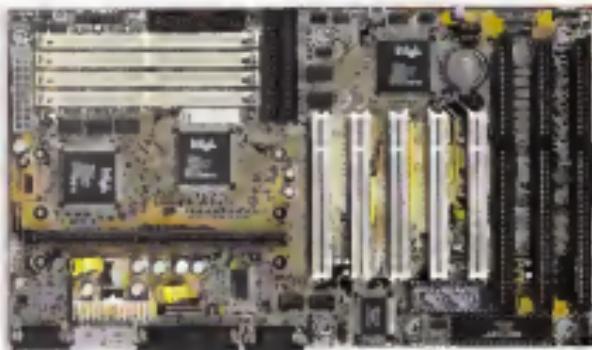
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Catch The Highlights:

Network Computing, Mobility, Windows and Video!

By Jeff Evans and Grace Camerian



Canada for the first time to an expected 60,000 attendees.

The main new themes at the show included networking technology and network friendly personal computing devices, increased performance and connectivity in mobile computing devices, the further expansion of the Windows OS into new applications at every level of computing from enterprise servers to handheld PCs, and a new wave of digital video products leading up a general advance in graphics performance.

One common topic of idle chatter at the show was the subject of who didn't show up this year—the traditional Big Three of personal computing, IBM, Apple and Compaq were all absent no-shows.

Notebook Heaven

The notebook market is shaping up to be very competitive in 1997, based on the offerings shown thus far. Toshiba's booth was busy, with crowds marching in to see the notebook maker's newest entry, the sleeker (and less two探頭) Liberto PC, as well as the latest Vectron and other notebook models.

Canadian notebook maker Eurotronics was showing an new 20MHz Pentium III model, which the company claims is the fastest奔腾III notebook on the market.

Handheld computers were strongly in evidence, with the U.S. Robotics Palm Pilot Pro continuing to cross continents among all levels of users (in COMDEX/Canada numerous people were observed actually walking around using Palm Pilots). Philips showed its innovative Volo Windows CE handheld, featuring a high speed chipset, voice dictation recorder and 19.2Kbps modem. LG Electronics also had a nicely finished CE unit with better modem, for \$699.

Software Retailing Award

Microsoft Canada Inc., in a Canadian-only initiative, launched the first annual Microsoft Canada Golden Awards for leadership in the Art and Science of Software Retailing, at a black-tie function in downtown Toronto, during COMDEX. The first awards will be given out during COMDEX/Canada '97, based on a variety of retailing criteria. Microsoft says the awards will be decided by a panel of judges, and the retailer doesn't necessarily have to sell Microsoft product. Nominations will be made by customers, and Microsoft plans a significant marketing campaign to encourage nominations.



Photo: G. L. C.

"The retail industry is under strong pressure," commented Frank Clegg, Microsoft Corp. vice-president, explaining the awards are intended to "get people to think about retailing and doing a better job in Canada. We think it will be rewarding for everyone."

To kick off the initiative, a life-time achievement award was given to Harry Hart, president and CEO of Hartco Enterprises Inc. The computer division of his company, founded in 1976, now has more than 190 locations, under such names as MicroAge, Compucenter and Compuscan.

Celestica Teams With Keating

At COMDEX, Toronto-based memory manufacturer Celestica announced an agreement with manufacturer's representatives Keating Technologies Inc.

Keating will provide sales, marketing and technical support services for Celestica's memory products in Canada. While Celestica has been making an international push for its products, this move is designed to help build the company's presence at home. Ray LeBlanc, Celestica's vice-president, memory sales and marketing, and Keating is expected to help develop the market in Canada "to give some advantage in the volatile market-place."

"What Ray's looking at is total market management. They've got to have Canadian sales be strong. Keating has a strong Canadian presence, and our channel relationships are already intact and ready to go," said Sharon Springer, vice-president of marketing for Keating.

For Keating, the relationship with a Canadian company is unique, as traditionally Keating's clients are American companies looking for help breaking into Canada.

Acer Signs With Merisel

And Acer America Corp., in Massachusetts, signed a fourth distributor — Merisel Canada Inc. Merisel will be distributing Texas Instruments



Econo and Time/Matic notebook computers, Accellera and AmiNet/NetPower commercial desktop PCs, and Acer Alias servers. Monal, Tech Data Canada, Globeloc and IBM in Acer's Canadian distribution.

According to Anthony Lin, Canadian general manager for Acer, the company's focus this year has shifted strongly to the enterprise/business market, away from retail-oriented product

The Big Picture

There were a lot of bigscreen computer graphics and video eye candy sitting in the edges of the show. NEC, Mitsubishi, and Peugot were all showing 40-inch class flat screen plasma monitors. Dave Walsh, head of NEC Canada, pointed to a NEC 30-inch LCD color panel, and noted that while a 16-inch flat screen cost \$13,000 two years ago, it now costs less than \$3,000. As demand and production increases, he said, the factories producing today's exotic flat screens will be able to bring the



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screen monitor prices close to the level of traditional cathode ray tube (CRT) monitor prices. According to NEC dealers, about 25 per cent of monitor buyers would choose flat screen monitors if the price was no more than 50 per cent above the price of a CRT monitor. This indicates a large potential market for flat screens as prices continue to decline.

One of the most original monitors on view was

The Princeton Graphics System Arcadia home monitor, a 29-inch (27-inch diagonal viewable) so-called 'convergence' monitor. The Arcadia can handle both TV (composite NTSC) and computer (up to 60Hz PC or Mac video output) imagery. It's intended to facilitate using the family TV for surfing the Internet or playing video games. The most surprising detail was the Arcadia's price US\$999, or about \$1,470. A 31-inch model is also available. MAG Innovation also displayed new monitors, including its ED530, with the innovative JAG wheel control, which makes selecting monitor display options a breeze.

Toshiba's Digital Processing Systems showed its Spark direct DV editing product, a Mac or PC FireWire card that allows users to bring video data by cable from a digital camcorder to their computer; modify, edit and add effects to video sequences, and then transfer the edited video back to the camcorder to be recorded onto digital video tape. These are two obvious advantages to the FireWire approach: one, using all-digital media to avoid the generational loss involved in converting video from digital to analog; and two, the ability to use digital video tape as a practically infinite storage medium.

New graphics software was rather scarce, but Adobe showed its recently released version of the Illustrator program to substantial crowds. For gamers, a new wireless 3D joystick from Terrestrial employs infrared and ultrasonic sensing to allow users to, for example, aim and fire naturally.

For mobile digital video creation, Hitachi showed its miniaturized MP-EG1A camera, which can create up to 30 minutes of full motion video and audio, or 3,000 still images. The MP-EG1A can save mobile video or still images in MPEG-1, JPEG, or JPEG with Audio formats. Digital cameras were everywhere at the show, from a dizzying array of vendors, including Agfa, Epson, Casio, Sony and Minolta.

With prices ranging as low as \$370, and with a new generation of high-resolution 'megapixel' cameras hitting the market — the digital camera market seems destined to continue to take off.

Some highly innovative new color printers were in evidence at the show. At less than \$200, Lexmark's model 1000 Color Jetprinter gives high-speed, 600 dpi black-and-white or full color text and graphics to Windows PC users. At that price, the Lexmark 1,000 would seem to conform to the cost-sister marketing model which sees personal ink-jets as 'small units' for encouraging sales of ink cartridges and paper, which is where the profit opportunity lies for manufacturers and resellers. For the graphics professional, Epson debuted a new 1,440 by 720 dpi overprint (17-inch by 23-inch) color ink-jet printer — the Epson Stylus Color 3000. The Stylus Color 3000 is more than twice as fast as Epson's previous large format ink-jet — the Color Stylus Pro XL, and comes with a true PostScript Level 2 PowerRIP from Burny Graphics. It is both Mac and Windows compatible. For the networked office, Xerox showed its Intellis DocuPrint C55 color laser printer, a new line which radically lowers the cost of high-speed color laser printing, in terms of hardware costs, consumables, and service and maintenance.

Imation showed its Performance Accelerator for the LS-120 (20MB floppy drive) which gives performance comparable in speed to a hard drive, and HP demonstrated tape backup systems for enterprise networks.

Whither Comdex?

The absence of some of the major PC vendors did lead to speculation that Comdex might be facing future troubles, due to an overburdened North American computer show calendar. While manufacturers and distributors are certainly more cautious in spending their limited marketing dollars, the scale of exhibitors and attendee interest in the show would seem to argue against any noticeable decline in Comdex.

And spending a couple of days walking the floor in a Comdex show is the quickest and most efficient way for resellers and business end-users to get a clear picture of the latest and best technology available. Comdex/Canada '97 was an excellent preview of the hot trends and products in the computer industry for the rest of 1997 and on into 1998. ■

Jeff Evans is Associate Editor of Canadian Computer Wholesaler and can be reached at jef@tepon.com. Edith Grace Czerniak can be reached at grace@netcom.ca.



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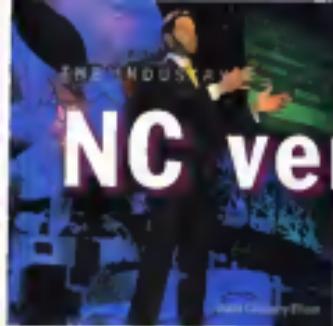
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NC versus PC: Who Will Win?

by Jeff Everett



The big story in computing since the early '90s has been the growth of the personal computer as a networked business device in the client-server environment. This success has come about despite the often strong resistance of computer network managers who deserved the complexity and unreliability of PC hardware, operating systems and software — compared to the relative simplicity and reliability of high-level operating systems such as UNIX and dumb terminals.

Even as the Windows/Intel-based PC has reached a state of apparently invincible superiority in the computing industry, some major manufacturers are betting on a non-Wintel alternative to become the computing mainstream in the next decade. At the recent launch of Oracle's in New York, the real focus was on the Network Computer (NC) as a solution for big business's computing needs. Oracle's CEO Larry Ellison showed, in hands-on demonstrations, the advantages of server/NC solutions in terms of simplicity and reliability. On stage in front of a live audience, he assembled a network, finally "out-of-the-box," caused a full "crash" of a Windows PC (by dropping it off a platform amidst smoke and flames), and showed how all his data was still safe on the NC alternative. He demonstrated the complete compatibility of Windows and Java applications, by running Windows in emulation on an NC, and transferring Microsoft Word files around easily from PC to NC.

Whenever Microsoft's Bill Gates has been asked about the potential of Network Computers (NCs) versus the PC at recent public events, he has made a face and asked the questioner how many NCs are being sold compared to PCs, and why would users want to risk additional platform to Windows, anyway? Up-front, Gates slaps the NC/Java model of computing unmercifully, pouring scorn on it as a deficient technology: "not ready," "too slow," "Windows does it all better."

However, if Gates is investing personal time and energy in driving the budding competition from Java, this can be interpreted as a good sign that he takes the threat seriously. In fact, Microsoft is playing a double game regarding the NC/PC and Java/Windows confrontation. Microsoft realizes some of the principal developers' tools for Java software creation, and at the recent Comdex/Canada '97 show in Toronto, some senior Microsoft Canada people strongly disagreed with suggestions that Microsoft was antagonized at the Java market.

A senior Corel executive claimed that a recent Microsoft purchase of a small Java business software development firm was part of a Microsoft plan to have a Java business software base ready if the NC market actually begins to take off, echoing a claim by Dale Burge of International Data Corp. (Canada) Ltd. that Gates is covering his bets in the NC market by quickly developing Java products in-house.

The NC Gets Real

Early versions of NCs were on display, showing a variety of third-party hardware and software devices approved by Network Computer Inc.

Schlomberger announced at New York that it would be the first smart card manufacturer approved for the NC market. With an NC Card, a user can simply insert his or her authorized card into the smart card slot on an NC, and type in a personal identification number (PIN), in a way similar to using an automated teller machine. The user can then access his or her account on the network, send, and retrieve, work with and save personal files.

The smart card approach provides a reasonably secure, simple method to offer people a "network passport," which will allow them to use any NC on the network as a full function personal workstation. Schlomberger has also announced an intention to license the Java Virtual Machine technology in its Solo smart card product, to encourage worldwide

Oracle Shakes Oracle8 Database

By Steve Casebeer



is a massive international launch — 25,000 new users in 10 countries — Oracle Corp. recently officially introduced its Oracle8 database.

"This is nothing less than a new generation of computing," said Larry Ellison, co-founder of Oracle's New York announcement. "Oracle8 is 10 times faster than any other product on the market," he claimed. "Oracle offers exceptional economies of scale... It supports 10 times more users, 10 times more data and is 10 times faster." Oracle's big disruptor part, at least according to Oracle, is its support of the Network Computer paradigm, meant to combine "easy-to-use information appliances with powerful data and application servers to overcome the prohibitive cost and complexity of traditional PC networks," says the company.

Oracle is expected to deliver large volumes of virtual data types over networks. In a statement, Ray Lane, Oracle's president and CEO commented: "Oracle will be the Microsoft Computing when Windows was to personal computing."

Reported features include:

- distributed queries and updates for data sharing across multiple servers;
 - data replication;
 - data archiving;
 - server-managed backup and recovery;
 - Web support;
 - automatic database tuning;
 - graphical print and disk management;
 - connection pooling and multiplexing;
 - advanced server-based queuing;
 - security policy enforcement; and,
 - standard support, such as OS/BCP, Oracle Objects for OLE and JDBC drivers.
- According to Oracle, key data warehousing features include:
- parallel lineage star query;
 - faster query execution for ROLAP data mining;
 - partitioned tables and indexes; and,
 - parallel insert, update and delete operations.
- The Oracle 10g will also offer data messaging services for corporate intranets and Internet service providers with standards-based E-mail, document workflow services, and a platform for development.
- On the object front, Oracle stores data as business objects, which the company says

between the tasks involved in installing complex business applications — increasing productivity. And its Oracle Image Catalog, along with third-party image retrieval cartridges from Storage and Retrieval, has won several for images found or characteristics of that image.

Mike Kennedy, a vice-president with the Micro Group, in Burlington, Calif., commented that Oracle's approach to handling objects is "in sync with the market demand."

For potential developers, the Oracle achieves reduces object caching and object mapping. "It allows developers to develop and maintain objects," he said, adding that the object mapping leads to improved performance.

Kennedy contrasted Oracle's strategy to that of Informix with the Universal Server model of handling object types. "It hasn't taken off like wild fire," he said, of Universal Server. "It's a solution looking for a problem."

Canada joined Oracle's efforts to compete to objects "an appropriate strategy, at an appropriate time."

Oracle says it has trained more than 1,500 database administrators and developers in 27 cities across 14 countries.

In the development front, Oracle uses its Developer/2000 — a rapid development tool to let developers write an application for both client/server and the Web, is certified Pure Java by JavaSoft, and Assignment/2000 is Oracle's lifecycle modelling and generation tool.

Oracle says it had 260 partnerships in its beta program, 1,500 in its early adopter program. A wide variety of vendors have developed support for Oracle in their products, including Digital Equipment Corp., Hewlett-Packard, Peoplesoft, Sun, Beers and Company. For example, with the Compaq BlastStart integration tool, Compaq says it simplifies the installation, configuration and optimization of Oracle on Compaq NT systems.

In a statement, Francis Ward, vice-president and general manager, enterprise solutions division, Compaq Computer Corp., said his company's customers are facing greater demands on database servers. "To meet these new demands, Compaq worked closely with Oracle to provide greater levels of power, availability and manageability specifically designed to meet the requirements of a standards-based distributed enterprise architecture."

Oracle was available on these platforms immediately: Windows NT, Solaris, HP-UX, IBM AIX, IBM SP3, Sequent PTX and Alpha AXP. Others were expected to ship within 90 days of the product's launch. List price starts at US\$2,200 for an eight-user license; Oracle users with MicroSupport are eligible for a free upgrade.

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smart card compatibility and easier application development for use with smart cards.

Consumer Market

Although the main immediate market for NCs is seen to be in business computing, there are some early attempts to find a retail market as well. Thomson Consumer Electronics and RCA have announced a partnership with NetChannel, a personalized Internet content provider that aims to allow information and entertainment access to the Internet to home users via Oracle database and set-top NC technology. Home users are expected to employ a set-top box to access custom info services via the Internet.

The NC Universe

Oracle and many of its partners have begun announcing the spectrum of hardware and software needed to make the NC option a reality. Gates has announced Version 1.7 of its WinFrame thin-client/server solution, aimed at enabling efficient management and delivery of applications from Windows NT servers to NCs. Oracle itself announced its first complete suite of software for NCs in the spring, the NC Desktop. This is a suite including a Java Virtual Machine, Video User Interface, NC version of Netscape Navigator, and NC server software designed to run on inexpensive Intel-based servers. NC client devices are being manufactured by vendors such as Sun Microsystems, IBM and Foma Electronics, offering a variety of features, but all, according to Oracle's Larry Ellison, are capable of running the full range of Java applications and file formats.

To facilitate the quick development of NC technology standards, Oracle and Netscape merged their Network Computer and Navice divisions respectively. The new company, named NCI, has the capability of developing standard-based NC software and new "Internet appliance" hardware. HDS Networks Systems, Inc. has launched its iWorkStation, an ultra-thin client that can run either Java or Windows applications over a network — using about one-ninth the bandwidth of a Windows PC,

according to HDS. All this effort has generated some results. Tektronix, basing its claim on an IDC study, claimed that it sold more than 70,000 X-terminals, networks and network computers in 1996, which represented about 27



per cent of the overall computer market in that year.

Masks Off, Gloves Off

What seems to be going on underneath all the posturing taking place at the dawn of the NC is that most sizable players in the industry have decided they're quite willing to make money off either the Windows/Intel platform, or the NC/Java platform. Gates doesn't gain any immediate benefit from actively promoting the NC or Java, so he doesn't promote it. His proprietary Windows family of operating systems and associated application software is enormously profitable, so he has nothing to gain by supporting a coalition of his rivals who are explicitly pushing Java as a Microsoft-alternative, or at least, a tamer.

However, Gates has given many hints that if someone creates a worthwhile software product category or market, he'll direct Microsoft to build or buy the products to gain a dominant position in that new market.

Microsoft's competitors are in many cases developing both Java and Windows products. Oracle, for instance, has announced Java applications servers for Windows NT. IBM is merely building both their client network computers (which run Java, Windows and mainframe terminal software), and internet Network PCs.

So who will win? Well, if the result of the birth of the NC is cheap, networked computing made available to millions of new users, then everybody wins, including Bill Gates. The Microsoft marketing machine has already figured out how to extract money very efficiently from billions of PC users. It can probably even figure out how to do the same with billions of NC users, if ever confronted with that problem.



Jeff Eason is Associate Editor of Canadian Computer Week/SmallBiz. He can be reached at jeff@vix.com.

Monitor Makers Target Niches

By David Tonkiss

There was a time when selling a computer monitor was a simple proposition. You told consumers their choices were phosphor or amber ones. Today, you almost have to go to a remote college to understand the breadth of models that vendors are shipping.

New Generations Of Flat Panels Arrive

While 14-inch cathode ray tube monitors are nearly extinct, many vendors are offering flat panel LCDs of that size, and larger.

Samsung Electronics Canada Inc. introduced its 400TFT and 500TFT (14- and 15-inch screens, diagonally) models at the

Comdex/Canada show last month in Toronto. These have suggested retail prices of \$4,699 and \$7,399 respectively.

Princeton Computer Systems also introduced two models at the show, the LD90 and LD90A, both with 15.4-inch viewable areas. Like the Samsung units, these are also pricey (\$3,299 to \$4,173 for the LD series). Princeton spokesperson Delia Zappettino says she doesn't see these becoming competitive with CRT-based monitors in the consumer market until the prices drop to about 1/3 times the cost of an equivalent-sized tube.

However, specialized markets do exist today for these devices, according to Richard Gallegos, Sciptec Technologies Inc.'s Canadian distribution manager. Where heat, physical size or susceptibility to electromagnetic radiation are bigger factors than price — the panel displays are being snapped up, according to Gallegos. Sciptec introduced its fifth-generation PT15G at the show. It has an estimated street price of \$3,500. It measures 14.6-inch inches diagonally, weighs 12.8 pounds and is designed so that it can be popped out of the stand and hung on a wall.

NBC Technologies Canada also recently introduced new LCD monitors under its Multisync LCD brand, including the MultisyncLCD2000. The 20.1-inch active matrix display will support up to 1,280 by 1,024 resolution. The company has also announced a 16-inch LCD400 model. Both will be shipped in August with estimated street prices of \$10,799 and \$7,399, respectively.

And speaking of large flat monitors, one of the more impressive ones was Mitsubishi's Leonardo, a 40-inch plasma panel, also introduced at the show. The \$16,000 unit will display VGA resolution, is four inches thick and weighs 66 pounds. It is expected to be available in October.

Bigger And Bigger

The Leonardo was just one of several oversize monitors at Mitsubishi's booth. Tucked in the corner was the MegaView 40, a rear projection unit that will be available later this year for about \$22,000.

Available now are slightly smaller CRT-

based units, like the 42-inch MegaView 42, which the company claims uses the world's largest mass-produced CRT.

One of the trends with these larger monitors is the inclusion of NTSC input jacks, to allow them to be used in home theatres with DVD-R/RM players, as well as plugged into VGA ports and serving duty as viewing screens for corporate presentations.

Princeton's Axana home monitors, for example, will support computer display resolutions of up to 800 by 600, but also include jacks to which consumers can connect a VCR or DVD player.

Another trend, driven by the same TV/monitor convergence, is the wide screen aspect ratio. Samsung Electronics Canada Inc.'s 2400W is a case in point. The wide-screen monitor has a 16:9 aspect ratio, unlike the normal computer screen aspect ratio of 4:3. Because of this, the resolution is a little familiar: 1,280 by 768 (instead of 1,024 by 768) and 1,024 by 600 (instead of 800 by 600). A Samsung spokesperson said that beyond the wide-screen movie possibilities, the monitor allows a full two pages to be displayed, a boon for DTP.

Crowding Up The Mainstream

Expect monitors to start pricing 17-inch monitors big time in the coming months. The evidence of that is the proliferation of models of that size, along with price cuts. ■

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NBC Technologies Canada	(905) 795-3600
Samsung Electronics Canada Inc.	(905) 819-2093
Sciptec Technologies Inc.	(519) 269-2668
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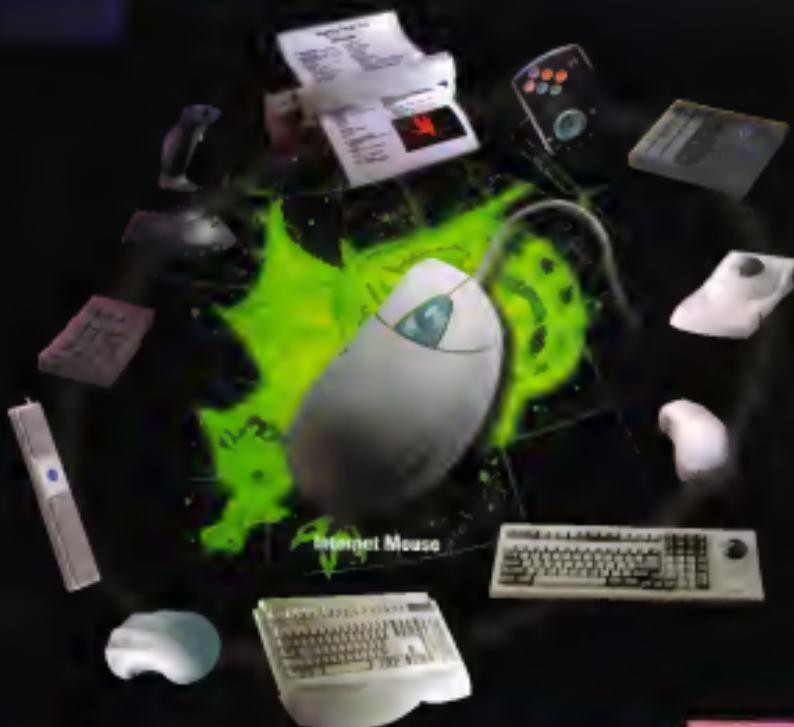
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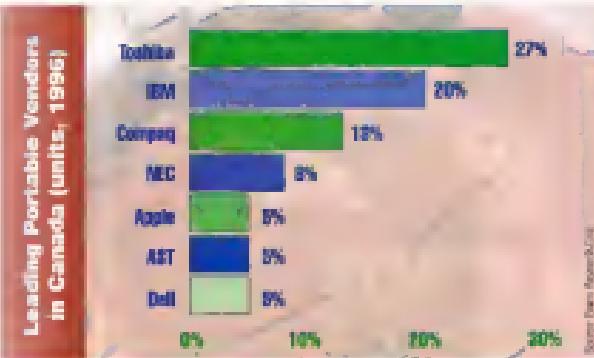
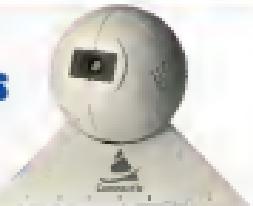
A recent report by Computer Intelligence (CI) reported that desktop videoconferencing, although "still in its infancy," is reaching the new market segments, such as the Insurance/Real Estate Agent and Business-to-Business Services market sectors.

These sectors are traditionally not major users of centralized videoconferencing, but according to the market research firm, are leading the early adopters of desktop videoconferencing technology. Indeed, according to CI, these sectors are account for approximately 60 per cent of all business locations using desktop videoconferencing and approximately 50 per cent of all desktop systems installed.

The survey was conducted by CI between October 1996 and March 1997 of 14,000 business locations in the United States.

But widespread adoption is hampered by two factors, said CI: the availability of low-cost, high-speed network bandwidth, and, an installed base of 400-and-above PCs capable of supporting a videoconferencing application.

CI's research indicates that only 10 per cent, or about 14 million, of the high-performance PCs in use at businesses are at locations that can boast network facilities capable of 56Kbps or higher speeds.



Reader Poll

Last Issue, we asked:

Which model closely reflects your view of the desktop flat-screen market?

- 1. There is a lot of interest in the screen displays, and we expect to see significant growth in demand for these products.
- 2. Flat-panel displays for the desktop will see limited expansion markets, but for now won't attract mainstream buyers until the prices come down a little.
- 3. Plasma-panel displays are just a niche market, and are far too expensive for the average consumer.

This Issue:

PC vendors in the industry certainly have crowded about offering computers that include MMX-based processors to the marketplace. And that technology is also part of nearly shipping Pentium II systems. However, Canadian Computer Wholesaler readers here widely the market may really know or care about.

MMX specifically. Are your customers clamoring for MMX systems? (On, no?)

Our question to you:

Which model closely reflects your view of computer purchases, in relation to MMX?

- Many customers are very aware of the technology and technical benefits of MMX, and are demanding MMX-based processors at their new systems.
- Some customers have a certain awareness of MMX, and are interested in MMX systems, because it's viewed as the hot new technology.
- Many customers have little knowledge or understanding of MMX.

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What's in Store for Stores

by David Rosen



What's in store for Canadian computer retailing? Many of the important lessons computer retailers learned last year centred around inventory: you either had too many of the wrong products or too few of the right ones. This year a different situation is emerging. In today's make-or-break reality, the focus is on outlet size and market differentiation.

Sales Are Growing

Overall, the news is good in the computer retailing business. According to Ken Billings, senior market analyst for research giant A.G. Nielsen, total Canadian sales of computer merchandise through resellers grew in 1996 to \$3.66 billion, up from \$3.5 billion the year before. But their success didn't come easy, considering the competition from both traditional and non-traditional computer sales organizations.

Canadian computer retailers continue to jostle for their share of customers. Computer mega-stores opening up across the country continue to muscle out smaller, independent dealers. As well, non-traditional computer outlets, from bookshops to toy stores, are making inroads into traditional computer retailing, especially for product lines such as books, CD-ROMs and consumer electronics.

Promised from the merger of Cole's and SmithBooks in 1995, Canadian bookseller giant Chapters Inc. is becoming a player in the software and CD-ROM market. Although the company won't discuss retail sales numbers, Helene Auclair, the company's director of marketing, says that software sales are now "in the Top 10 sales categories of our stores, often at the Top Five."

Toy stores are also gaining into the computer retailing marketplace. Worldwide, the Toy & It Us chain led the way for toy outlets, posting a triple-digit increase in total retail revenue from computer-related merchandise, to US\$69 million in 1996.

Making A Market

With non-traditional outlets moving in on the market, traditional computer resellers had to do something competitive. "We're seeing the successful resellers differentiate and create a market for themselves — even in the large supermarket organizations," explains Tim Billing, Ingram Micro Inc. (Canada)'s director of sales for its Consumer Markets Division. "One segmentation we're seeing is based on levels of buying expertise: some stores are geared towards the first-time buyer, while others target themselves as second- and subsequent-round buyers." Billing says that everything from the way the stores advertise to the after-sales support policies fall out of these fundamental marketing decisions.

Chain stores, Billing maintains, get people into the store by print advertising, primarily through newspapers. While this works for major resellers with large advertising budgets, Billing says a different strategy is needed for small, independent dealers. "Location and repeat business are keys to a successful small retailer," Billing maintains. "The only way to compete is to have a customer for life."

Splashed Ads, Slashed Prices

At one end of the computer retailing spectrum is Vancouver-based Future Shop, with 1996 revenues topping \$1.5 billion. Future Shop tends to rely on splashy retail advertising to attract customers into its stores. Once there, low prices are used to transform prospects into customers.

"Our roots really lie in the selection and low-price strategy," explains Eric Ortmannsen, a Future Shop spokesperson. But things are changing for Future Shop as well. "We're focusing more and more on service in the core value that people want, with a new in-store service division, unconditional repair service as well as after-sale training, support and service." Future Shop's next venture is corporate sales where, Ortmannsen says, large companies can purchase products through a direct sales force.

Experience Shows In The City

Wend Sullivan, Canadian regional sales manager for Tandy Corp.'s Computer City, explains the company's strategy is technological expertise rather than price. "We're definitely positioned to go after the more experienced user and serve their needs, as well as

the first-time buyer," says Sullivan.

"Computer City tends to be the place you go to get the latest technology, rather than the cheapest machine on the market," Sullivan maintains. "We will get down and battle at the \$1,500 to \$2,000 price point but, as we bring in top-of-the-line MMX machines and Pentium 200s, we can't keep those in stock."

According to Sullivan, the look and feel of each Computer City store has been designed specifically for its intended market. Product mix and knowledgeable staff are obviously key, but Sullivan claims extra sales staff in the labor-intensive upgrades and software departments are also important to the chain's success. Computer City also plans to improve the look and feel of each of its stores over the next 12 months. "We'll have separate sections for small office, home office, Internet and even kids," Sullivan predicted.

Keeping The Customer Happy

Specialization and differentiation are two words that Nylo Kesten knows well. President of Toronto's CD-ROM Store, Kesten specializes in, well — CD-ROMs. The retail store carries hundreds of titles divided into three product categories: home entertainment, home office and home information. "We stress content over newest item," Kesten explains.

"We're known as a specialty retailer, not only in the community in general, but in other computer stores as well."

Kesten suggests a major trend in the business is software developer consolidation. As an example, he cites the recent purchase of software developers Davidson & Associates, Simco On-Line and Knowledge Advantage by CUC International. Another trend he sees is the changing gender mix of his customers: "Myx was the first major game that was attractive to both men and women," he says. Many developers are now discovering that girls as well as boys can be key buyers.

To paraphrase an overused phrase: the only thing that stays the same in the world of computer retailing is change. And while change is important to the Canadian computer landscape, successful retailers find differentiation, segmentation and, of course, luck, are just as important.

David Rosen is a Contributing Editor at Canadian Computer Wholesaler. He can be reached at David.FYD@aol.com.

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Networking

The Market Is Now Everywhere

by Jeff Evans

veral networking infrastructures, based on non-proprietary, universal standards. This single factor has made networking the PC an explosive opportunity for resellers. However, the virtue of the PC's expandability, ability to accommodate new needs and technologies has also presented problems, one of the most basic of which is cost.

A raft of recent studies by consulting firms such as the Gartner Group have quantified the big fly in the PC ointment: maintaining a PC on a network is painfully expensive. According to the experts' best estimates, the price tag on the total cost of ownership of a networked PC is US\$8,000 to US\$12,000 per year. Only 10 to 15 percent of this cost is for hardware. The rest is for training, network infrastructure, software, maintenance, and user support. Fiddling around trying to get the system to work properly (or "tuning," as it is technically described)

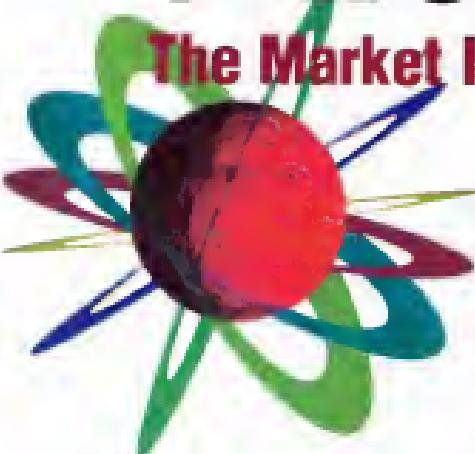
After a decade of client/server computing gradually bringing the Windows PC into the mainstream of business computing, network administrators are now facing the possibility of having to adopt entirely new technologies such as Network Computers (NCs) and Java software. This creates new opportunities for resellers, but also risks: buying on the wrong product can be costly for both end-users and vendors.

Idiot Proofing and Security

The more widespread and essential computing becomes, the more concern there is for maintaining network operations. Demand for products to assist with the reliability and security of networking increases proportionately. To maintain the performance of NT systems, for example, Executive Software has done well selling its Diskkeeper 2.0 for Windows NT 3.5. The markets for antivirus software, firewalls, software usage monitoring programs, encryption, and secure commerce services are all experiencing major growth.

Scaling Up and Down

At the high-end of enterprise computing, the capacity of network databases and servers to handle vast amounts of information, and high volumes of queries or transactions is increasing exponentially. Sun has announced servers that can manage many terabytes of data. At a Scalability Day, Microsoft showed off



The pervasive spread of Internet networking (Web browsers and the HTML standard) worldwide is turning the promise of "information at your fingertips" into a reality.

For most PC users, computer networking technology is becoming a basic part of daily life. For computer resellers, at all levels, as part of any computer sale, an ability to accommodate customer needs for a networking solution is an increasingly critical skill. From consumer retailing through VARs, and on up to large-scale solution providers/integrators, networking has become a key challenge and opportunity in the information technology market of late '90s.

Fortunately, along with increasing demand for networking solutions, networking technology has become cheaper, simpler to integrate and maintain, and much higher in capacity, flexibility, and interoperability (compatibility with other network systems) in recent years.

PC Serendipity

The PC was originally conceived as a stand-alone, unconnected personal information tool, and for that reason, it was generally despised by networked computing professionals. "Why would anyone want their own computer?" was a common, deriding response of mainframe computing professionals looking at the first home PCs. The pros understood the power of networked computing, and couldn't imagine why anyone would want to try to go it alone on a disconnected, low-powered, inferior system.

From the enterprise computing perspective, client/server computing came along on the PC as spin-off itself. Even though the PC is not inherently a good platform for networking technology, with enough time, money and "tweaking," it has been shaped into a tolerably effective part of mid/large-scale network computing. The advent of the Internet, especially the World Wide Web, has allowed the PC to tap into a vast



partners such as Tandem, Compaq and Digital performing tasks such as managing multi-strabyte map databases, and processing more than one billion transactions per day. At the lower end of the scale, there is a strong trend towards applying network solutions for mid-to small-sized businesses that are almost "out-of-the-box" commodities. The premise is that the user can simply turn on the server, string network cable, and plug in PCs or MCs. Minimal networks for small offices and even homes are possible, using products such as D-Link's 'Hobby'.

Compaq, IBM and other vendors have established divisions and developed products to serve the SOHO networking market.

Faster Speeds, New Applications

In the past few years, there has been a constant demand for more bandwidth speed, to handle increased numbers of users employing traditional business applications, and also to enable new, often more data-intensive applications. Most current Ethernet network interface cards (NICs) are compatible with both 10Mbps and 100Mbps megabit networks. Many PC card manufacturers making cards for systems, such as Compaq, U.S. Robotics and Xircom, make cards that include both a 33.6Kbps or 56Kbps telephone line modem, and a 10/100Mbps Ethernet card.

IBM, in addition to a full spectrum of Ethernet and Token Ring networking products, has recently offered a line of high-speed ATM (Asynchronous Transfer Mode) networking solutions to desktop PC and workstation users. ATM has a number of advantages over traditional Ethernet and Token Ring technology (higher speed, and the ability to "guarantee" uninterrupted bandwidth to priority users), and according to IBM, will come down in price to the point where it is comparable to Ethernet.

Sales of videoconferencing cameras and systems, from vendors such as PerseusTel, Cisco, U.S. Robotics and Connectix have consistently increased due to a combination of better video compression feature advances, and higher bandwidth phone lines (such as ISDN) and networks.

Digital Equipment Corp., in particular, has gained expertise in video server technology, for video-on-demand applications. The next wave of high-speed networking involves ultra-fast Ethernet or ATM networks using fibre optic cables to support 1Gb networks.

Outsourcing

With the growth of Internet-based networking for business, one approach to managing networks that many firms have investigated is to contract their network needs out to MSPs (Network Service Providers).

The logic of this approach is based on the fact that establishing a full-time network administration in-house is a major investment, in personnel, technical infrastructure and training. With manufacturer-based business technology, it's possible for a firm to set the specifications of what it needs in terms of networking, and then talk to a variety of MSPs to get quotes. Once a contract with an MSP has been agreed to, it's up to the MSP to maintain the integrity and reliability of the system. Some major players have jumped into the resourcing MSP market, including Network 1st (also which both started as personal Internet Service Providers); Cisco in particular has achieved a remarkable transformation, shedding much of its individual dial-up user base, and developing the commercial network business to the point where it is now 80 per cent of their revenue. Markham, Ont.-based PINNet bills itself as "Your Internet Business Partner," offering a range of services such as "LAN On-Demand" (TCP/IP connectivity from an office to the Internet) and private IP networks with dedicated Internet access, for the creation of con-

LARGE MONITORS

Market Broadens For Quality Big Displays

by Jazz Shoot, Tom Bougham-Walter and Steve Juslinska

Working with an 18-inch monitor has become a suffocating experience in a low-resolution world. This is an opportune time for your customers to invest in a new display.

Indeed, a display is one component that is truly multi-platform and can last many generations of computers. Larger monitors have become the norm, and prices are steadily falling, while quality continues to rise. Most dealers are now packaging and marketing 15-inch displays instead of the so-called "standard" 14-inch offerings.

Cathode Ray Tube (CRT) technology may seem dated by PC standards, but monitors could have been changing and improving dramatically in recent years. New innovations in refined production materials and processes have made monitors cost-effective, sharper, brighter, and more photo- and distortion-resistant. They emit fewer worrisome electromagnetic emissions than ever before as well. In addition, many monitors now come standard with over-luminance management such as digital controls and energy-saving power management. It is quite surprising how much CRT that money can buy.

Recent improvements have made monitor-buying decisions more complicated, with hundreds of displays from which to choose, varying greatly in features, performance, and price.

Visually, Bigger Is Better

The choice of size must fit the application, budget and footprint. Realistically, most aging 14-inch monitors support resolutions of 800 by 600 and even 1,024 by 768 pixel resolutions, in addition to standard VGA's 640 by 480. But increasing your resolution without increasing your screen area has its draw-

backs. Garbage in, garbage out! Displaying more information into the same amount of space decreases the relative size of areas on the display to the point that text may become unreadable. And legibility is definitely an issue for your customers.

Unfortunately, a 15-inch monitor doesn't realistically permit any higher resolution than a 14-inch display. As a result, the 17-inch monitors are quickly becoming the norm for business PCs, television graphics professionals. Regular business users who are writing proposals, creating spreadsheets, and creating presentations, are far better off with a 17-inch than a 15-inch display. When switching between multiple windows, or viewing a full-page layout for a newsletter or other desktop-publishing jobs, working at 1,024 by 768 is desirable. Most 17-inch screens also let the user sample the sights at 1,280 by 1,024 resolution — more than quadrupling the working area of the 14-inch VGA.

For these applications, the 17-inch monitor is a wise choice. For those to whom budget is not an issue, or if they're CAD/CAM or graphic professionals — the 20-inch display is a wise choice. But it isn't always popular, because of its expensive price tag, maximum size, weight and footprint.

Plug and Play

Thanks to Microsoft Windows 95's Plug and Play, the job of installing a new monitor or matching it to other system components has become easier. The Plug and Play standard synchronizes the PC with the display through a data channel (EDC) incorporated in the VGA connector. The monitor uses the DDC to communicate its current and maximum scan rates to the PC. This allows the graphics card in the PC to lock in the optimum settings

and highest possible refresh rates without any reference to technical documentation. Another feature that is quite impressive is VESA's Enhanced Video Connector (EVC), designed to replace the familiar 15-pin and nine-hole-cable BNC connectors. EVC will not only support higher bandwidths than existing cables, but also will let your customers plug multimedia input devices such as cameras or microphones directly into a monitor.

Health and Safety

If potential electromagnetic emissions from a monitor are a concern for your customers (and many would argue they should be), recommend a monitor that complies with the MPR-II or TCO standards. These Swedish guidelines set limits on a monitor's extremely low-frequency (ELF) and very low-frequency (VLF) emissions.

MPR-II compliance adds little to a monitor's cost, since manufacturers only need to provide better shielding inside the monitor's case and add compensating magnets to cancel out the fields created by the powerful electromagnets that direct the electron beams. The stricter TCO standard specifies an emission level even lower than MPR-II, valid directly in front of the monitor — which costs more, due to the difficulty of shielding the monitor's face with a special coating.

Our Tests

We used DisplayMate by Sosera Technologies (1-800-932-6323 or (908) 747-6868) to run a series of test and color patterns on each monitor. DisplayMate is an excellent diagnostic tool designed to aid users in easily determining if their monitor and video cards are performing as they should.

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Apple AppleVision 1710QV**Support For Resellers:**

Marketing funds

Reseller referrals

POP displays

National advertising

One-year warranty includes parts and labor

Toll-free tech support

Dedicated technical Web site

Dealer-specific space on the Web site

Dealer User Availability:

There is a standard 15 percent off dealer discount, with a maximum of one unit per product family.

Azura iTV+**Support For Resellers:**

Three-year warranty includes parts and labor

Toll-free tech support

Reseller Discounts: Yes**Editor's Notes:**

Azura offers a low-cost 17-inch monitor with a 0.31-mm dot pitch and a 15.4-inch viewable screen. The maximum resolution on this unit is 1,280 by 1,024 at 60Hz, which automatically places that par-

Editor's Notes:

The 1710QV from Apple is more or less a Mac user. It offers a viewable screen size of 16.1 inches, a dot pitch of 0.28-mm and a maximum resolution of 1,280 by 1,024 at 75Hz. The monitor features built-in speakers and a microphone for out-of-the-box multimedia, and is MPR-II compliant. It uses aSony Trinitron tube to deliver sharp images with great clarity. When not in use, the monitor's power savings mode puts it into a screen-sleep state, saving considerable amounts of energy. The 1710QV has an estimated street price of \$4,299.

**Art Media TM188ST****Support For Resellers:**

Reseller referrals

Three-year warranty includes parts and labor

Toll-free tech support

Editor's Notes:

ArtMedia's new TM188ST is aimed at professionals in the CAD/CAM/CAL industry, as well as at high-end graphic designers and users of advanced business applications. The tube on this model

is a Trinitron model that uses only when absolutely required. Test and color patterns on our tests proved to be quite good. The vertical frequency ranges on the monitor are from 50 to 60Hz, with the horizontal range being 30 to 60kHz. The unit weighs 18 kg and consumes a maximum of 130W while being used.



is of the Trinitron variety, offering a dot pitch of 0.25-mm. Horizontal scan rates range from 30 to 60kHz, while its vertical refresh rates go as high as 150Hz. At its extreme resolution, the TM188ST is capable of 1,280 by 1,024 at 60Hz, although the optimum operating resolution for this monitor is 1,280 by 1,024 at a flicker-free 50Hz. The on-screen display (OSD) offers a wide variety of user-configurable settings, and is easy to operate. The suggested retail price on this model is \$1,299 and comes standard with a three-year limited warranty.

Acer AcerView 780c**Support For Resellers:**

Co-op advertising

Three-year limited warranty includes three-year parts and one-year labor

Reseller Discounts: Yes**Editor's Notes:**

Acer's latest 17-inch model is the 780c. This monitor offers a reasonable compromise between quality and performance. With a 15.4-inch viewable screen and a 0.26-mm dot pitch, the monitor is capa-

ble of delivering up to 1,280 by 1,024 at a solid 75Hz refresh rate for great-looking images. It features four-color temperature presets, many configurable options through the easy-to-use OSD, and vertical refresh rates as high as 120Hz. The 780c weighs 18 kg. Test and color patterns were sharp, with good quality and no problems encountered.

**Samsung 700p****Support For Resellers:**

Reseller referrals

Three-year warranty includes parts and labor

Toll-free tech support

Dealer User Availability: Yes**Editor's Notes:**

With a dot pitch of 0.26-mm and a viewable screen size of 15.4 inches, Samsung designed the 700p to deliver a slew of features

coupled with performance. The monitor features an exceptionally clear screen capable of producing some of the best images we've seen in this roundup. Vertical refresh rates are available up to a VESA recommended 1024x768 at 128Hz for comfortable viewing with plenty of screen real estate. The 700p is capable of even higher resolutions up to 1,280 by 1,024 at a refresh rate of 75Hz. All in all, the 700p offers a good balance of features, performance, and a price that won't set your customers too far back.

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WINDOWS

(Oct. 1996) "KDS's new VSX-7 monitor is a feast for the eyes with its clear, crisp picture and clean, modern design."

MacUser

(Dec. 1996) Awarded 4 stars. "Out of a field of 47 17" monitors, only 3 scored a higher rating."

EHTC January 1997

"Out of 24 monitors tested Ryco said the KDS 17" VS-7 was one of the lower cost monitors deserving mention as good choices for home systems."

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Daytek DT-1731D**Support For Resellers:**

Marketing funds

Reseller referrals

POP displays

National advertising

Three-year warranty includes parts and labor

Toll-free tech support

Volume Discounts: Available**Demo Unit Availability:** Yes**Editor's Notes:**

The DT-1731D from Daytek is a great example of a lowered monitor without a huge trade-off in quality. This monitor offers a 16.3-inch viewable screen size — the largest in its class among this

model's competitors. It features a 0.28-mm dot pitch, with a maximum vertical refresh rate of 80Hz. At 1,280 by 1,024, the maximum attainable refresh rate is just 60Hz, so we recommend keeping this monitor at 1,024 by 768 for a flicker-free display. Weighing in at 17 kg and with a power consumption of 100W, this monitor is a great option for anyone looking to get good performance at a low price. Daytek expects to have a brand-new model which should be available by the time you read this. The new model will employ a Mitsubishi DiamondTron tube.

Firx FX-08**Reseller Authorization:** Required**Support For Resellers:**

Reseller referrals

Demo program for resellers on CD-ROM

Three-year warranty includes parts and labor

Volume Discounts: Yes**Demo Unit Availability:** One demo unit per model per location**Editor's Notes:**

The new FX-08 is capable of resolutions as high as 1,024 by 1,200 at 60Hz. Vertical refresh rates on this monitor go all the way up to 160Hz for the ultimate flicker-free display. The FX-08 has a 15.6-

inch viewable screen with a dot pitch of 0.28-mm for sharpness and graphics. It comes with preset color temperature settings ranging from 4,000K to 10,000K. The on-screen display is available in a total of six different languages for the ultimate in flexibility. Color reproduction and image quality were both exceptional. There were no noticeable focus problems at all when we switched to a resolution of 1,280 by 1,024. Even 1,024 by 1,200 proved to be easily readable with small text. If performance is your first priority, this monitor is unmatched.

Goldstar StudioWorks 700**Support For Resellers:**

Marketing funds

Reseller referrals

Three-year warranty includes parts and labor

Toll-free tech support

Volume Discounts: Arranged through distributors**Demo Unit Availability:** No, via distributor or Goldstar**Editor's Notes:**

This 16-inch viewable screen offers a fine dot pitch of 0.25-mm and refresh rates up to 120Hz. The maximum attainable resolution on this monitor is 1,600 by 1,280 at 60Hz, but we noticed focus difficulties

occasionally at that resolution. At 1,280 by 1,024, images and small text were still acceptable with a slight amount of blurring at the corners. The monitor has two color presets at 6,000 and 9,000 Kelvin, has an eight-plane OSD which is very thorough and features 40 memory settings. Of these settings, 16 are preset at the factory, leaving the user a total of 24 remaining — still far more than most users would need. Test patterns were good overall, although the two sharper ones were noticeable at all times.

Hyundai DaedacSpace 17B+**Reseller Authorization:** Required**Support For Resellers:**

Marketing funds

Reseller referrals

POP displays

Three-year warranty includes parts and labor and picture tube

Toll-free tech support

Volume Discounts: Yes**Demo Unit Availability:** One demo unit per model per location**Editor's Notes:**

Although the dot pitch on this model is 0.28-mm with a viewable screen size of 15.6-inches, it managed to produce some of the best

images and test patterns we've seen. At 1,280 by 1,024, this was exceptionally good, although only at 60Hz. The maximum vertical refresh rate on this monitor is 158Hz. If you try to exceed either a refresh rate or resolution, the OSD will immediately give you a message saying "Out of Range." Preset color temperatures are for 6,000 and 9,000 degrees Kelvin, plus one additional setting for a user-defined configuration. Compliance is met with both MPR-II and the TCO '92 standards. This monitor is definitely worth a second look.



What's needed here? An eye tuck?
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grille, non-glare screen coating and
vertical refresh up to 120 Hz?

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Large Monitors

	Acer AcerView 2100	Apple AppleVision 2110W	ArtMatica TM195T	Averis 13M4	Buytex BT-17310	Eizo FX-C3
Viewable screen size	15"	16.1"	15"	15.4"	16.1"	15.4"
Depth	1.6"	0.8"	0.9"	1.2"	0.9"	0.8"
Screen coating	AS/AS	AS/AS	AS/AS	AS/AS	AS/AS	AS/AS
Horizontal freq. range (kHz)	30-80	30-42	30-45	30-45	30-80	30-80
Vertical freq. range (kHz)	50-120	50-120	50-120	50-120	50-120	50-120
Max. resolution at frequency	1280x1024, 75Hz	1280x1024, 75Hz	1280x1024, 10Hz	1280x1024, 60Hz	1280x1024, 80Hz	1280x1024, 80Hz
Max. power consumption (W)	100	70	140	120	100	100
Weight (kg)	11	9.5	10	10	11	10.5
On-Screen Display	Yes	Yes	Yes	Yes	Yes	Yes
Contact	1-800-373-0224	1-800-253-2384	800-431-2011	800-966-9882	1-800-251-8881	1-800-828-5202
Internet	www.acer.com	www.apple.com	www.artmatica.com	www.averis.com	www.buytex.com	www.eizo.com
Warranty	1 year	1 year	3 years	3 years	3 years	3 years
Supported Resolution	640	640	640	640	640	640
Street Price (as estimated)	\$200	\$1,250	\$200	\$210	\$200	\$200
Trade Price	\$700		\$200	\$245		

	Mitsubishi Diamond Pro 1700M	Moxon SM795F	NEC P750	Nestech N7950	Sprintek V770	Panasonic PanMedia PM17
Viewable screen size	15"	15"	15"	15.4"	16.1"	15"
Depth	1.2"	0.9"	1.2"	0.9"	0.9"	1.2"
Screen coating	AS/AS/AS	AS/AS/AS	AS	AS/AS	AS/AS	AS/AS/AS
Horizontal freq. range (kHz)	30-65	30-65	30-45	30-65	30-80	30-80
Vertical freq. range (kHz)	50-120	50-120	50-120	50-120	50-120	50-120
Max. resolution at frequency	1280x1024, 80Hz	1280x1024, 80Hz	1280x1024, 70Hz	1280x1024, 70Hz	1280x1024, 60Hz	1280x1024, 60Hz
Max. power consumption (W)	100	85	95	110	100	100
Weight(kg)	12	10.5	10	11	10	10.5
On-Screen Display	Yes	Yes	Yes	Yes	Yes	No
Contact	1-800-450-0407	800-765-3800	1-800-399-0101	1-800-955-0540	1-800-451-7081	1-800-828-5202
Internet	www.mitsubishielectronics.com	www.moxon.com	www.nestech.com	www.nestech.com	www.sprintek.com	www.panasonic.ca
Warranty	3 years	3 years	3 years	3 years	3 years	3 years
Supported Resolution	640	640	640	640	640	640
Street Price (as estimated)		\$870		\$2,100	\$200	\$200
Trade Price						

Note: AS — anti-glare; AG — anti-static; AF — anti-reflection.

All prices shown are in Canadian dollars, unless otherwise indicated.

Gallien-Krueger Studioworks 710	Hybrid Behringer 17B+	IEM G72	Dynamic MT-2017E	KDS VS-3	 PSSL	TTX TopTech	MAX Innovation BN017
16	16.7	16.1	16	16.8	16.7	16.7	16.1
120	120	120	120	120	120	120	120
AQ/AQ	AQ/AQ	AQ/AQ	AQ/AQ	AQ/AQ	AQ/AQ	AQ/AQ	AQ/AQ
20-40	20-40	20-40	20-40	20-40	20-40	20-40	20-40
50-100	50-100	50-100	50-100	50-100	50-100	50-100	50-100
1,000x1,200,000	1,200x1,200,000	1,200x1,200,000	1,200x1,200,000	1,000x1,200,000	1,200x1,200,000	1,000x1,200,000	1,000x1,200,000
120	120	120	120	120	120	120	120
115	115	117	120	117	115	115	115
No	No	No	No	No	No	No	No
025/070-000	1,000-100-0000	1,000-000-1000	0100-000-1000	1,000-KDS-0001	0000-000-0000	0000-000-0000	0000-000-0000
www.gallienkrueger.com	www.behringer.com	www.jc-den.com	www.vjpro.com	www.klakson.com	www.edgetech.com	www.maxinnovation.com	
3 years	3 years	3 years	3 years	3 years	3 years	3 years	3 years
\$799	\$799	\$1,070	\$1,070	\$1,070	\$1,070	\$1,070	\$1,070
\$200	\$200	\$1,070	\$1,070	\$1,070	\$1,070	\$1,070	\$1,070

Philips Brilliance 107	Samsung 700p	Scopion PT50	 PSSL	Sony 17S8E2	TTX 7745S	VivitekD5 GT71
16.0	16.7	16.1	16.0	16.8	16.7	16
120	120	120	120	120	120	120
AQ/AQ/AQ	AQ/AQ	AQ	AQ/AQ	AQ/AQ/AQ	AQ/AQ	AQ/AQ
20-40	20-40	20-40	20-40	20-40	20-40	20-40
50-100	50-100	50-100	40-100	50-100	50-100	50-100
1,000x1,200,000	1,200x1,200,000	1,000x1,200,000	1,000x1,200,000	1,000x1,200,000	1,200x1,200,000	1,200x1,200,000
115	116	116	114	116	116	116
0	0	16.0	20	17.5	16.7	16.1
No	No	No	No	No	No	No
010-202-0001	000-00-0000	1,000-000-2000	010-000-0111	1,000-000-0000	1,100-000-1000	
www.philips.com	www.samsung.com	www.ptech.com	www.vjpro.com	www.klakson.com	www.edgetech.com	
3 years	3 years	3 years	3 years	3 years	3 years	3 years
\$1,099	\$1,299	\$1,070	\$1,070	\$1,070	\$1,070	\$1,070
\$1,000	\$1,000	\$1,070	\$1,070	\$1,070	\$1,070	\$1,070

KTX TapStar**Support For Resellers:**

Three-year warranty includes parts and labor

Co-op advertising

Toll-free 1-800 tech support

Editors' Notes:

If you've got a budget-conscious shopper, KTX has just the thing for you. With a viewable screen size of 15.7 inches and a 0.28-mm dot pitch, this monitor produced good quality images up to 1,024 by 768, with a slight focus loss around the edges and corners. Anything

above this resolution is not recommended. The monitor features a handy self-test feature which runs through all of the options on the on-screen display, and runs a self-test on each of them. Vertical refresh rates are available as high as 90Hz, with a horizontal scanning frequency of up to 102kHz.

**KDS VS-9****Support For Resellers:**

Co-op advertising

Toll-free 1-800 tech support

POP displays

Three-year warranty includes parts and labor

Toll-free tech support

Volume Discounts: Yes, arranged through the distributor**Demo Unit Availability:**

KDS does not offer a national demo program but supports the distributor when they request devices for volume opportunities

Editors' Notes:

The KDS VS-9 packs a lot of punch for a great price. To start off, it

has a viewable screen size of 15.8 inches, with a dot pitch of 0.26-mm. Refresh rates up to 100Hz are supported, with the maximum resolution being an incredible 1,600 by 1,200 at 75Hz. The OSD is excellent, with very easy to read fonts and icons, making it very easy to use. Color temperatures are preset at 6,200 and 9,300 Kelvin, as well as at room for an additional user-defined setting.

The VS-9 produced some very good quality images with sharp text. Focus was exceptional at 1,280 by 1,024. For a mix of great features, good performance and a great price, look no further.

**MAG i9717****Support For Resellers:**

Marketing funds

Retailer referrals

Three-year warranty includes parts and labor

Toll-free tech support

Volume Discounts: Yes**Demo Unit Availability:**

Yes, select models

Editors' Notes:

The new Mag i9717 features a larger viewable screen of 16.1

inches with a dot pitch of 0.26-mm capable of resolutions as high as 1,600 by 1,200 at 49Hz. On the front of the monitor is an interesting wheel rarely encountered. The OSD options are controlled via a wheel which offers access to all the various features in a smooth and easy to control manner. Test patterns showed that the monitor is well-designed, with only a slight amount of bezel loss at the very high resolution. MAG recommends this monitor for high-end corporate use, business graphics or commercial imaging. The i9717 is a good choice regardless of its intended use because it offers professional display capabilities at a price that's not restricted to corporate use only.

**Monitor SM785P****Support For Resellers:**

Co-op advertising

Retailer referrals

POP displays

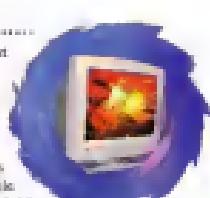
Three-year warranty includes parts and labor

Toll-free tech support

Volume Discounts: Yes**Demo Unit Availability:** Yes, with usage restrictions**Editors' Notes:**

This model features a 16-inch viewable screen with a dot pitch of 0.29-mm. The maximum resolution is 1,280 by 1,024 at 60Hz,

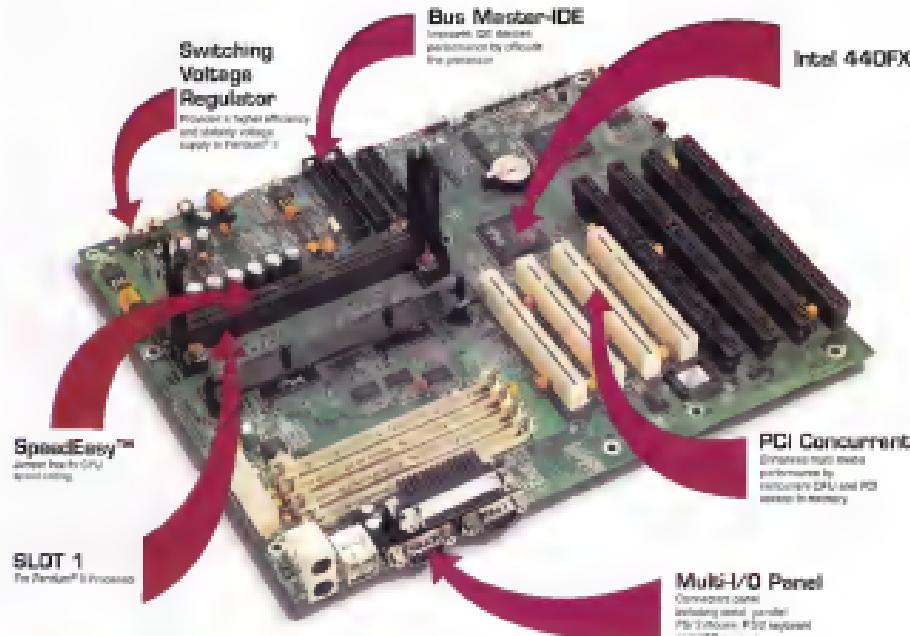
making use that setting only for short periods of time when required. With a vertical frequency range of up to 120Hz, all lower resolutions will provide blur-free displays. When compared to typical 17-inch monitors, the Monitor SM785P occupies considerably less desk space, while still providing a viewable screen of 16 inches. The unit consumes only 95W of power, and weighs 16.8 kg.

**Sony 1751Z****Editors' Notes:**

Using Sony's very own Trinitron tube technology, the 1751Z has a 15.4-inch viewable display with a dot pitch of 0.25-mm. Resolution as high as 1,600 by 1,200 is available at 60Hz with additional support for all common VGA modes for a true flicker-free display. There's no marketing a Sony monitor fast by working

with one for a few short minutes; you quickly begin to appreciate its many features. This on-screen display gives you complete control over everything imaginable from more reduction in convergence adjustments. Designed for high end graphics such as CAD/CAM, the 1751Z isn't available at bargain prices, but is definitely a worthwhile investment.

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Per huius ergo problematis primis quae sunt res

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**10. Factors associated with being a low-income single
individual or adult living alone**

Imron MT-907i**Support For Resellers:**

Co-op advertising

Reseller referrals

Three-year warranty includes parts and labor

Tech-line tech support

Volume Discounts: There's free shipping on five or more units, and a price break after 10 units.**Does Our Availability:** There is reduced pricing for demo units.**Editor's Notes:**

The MT-907i features a 16-inch viewable display with a fine dot

pitch of 0.25-mm. Its maximum resolution is at an extreme 1,600 by 1,200 while maintaining an impressive refresh rate of 70Hz. It goes without saying that the test patterns we produced on this monitor were without a doubt the best that money can buy. The OSD offers complete control over anything and everything that you could ever want to configure. Focus loss was not noticeable and we hit the really high resolution of 1,600 by 1,200, at which point it was barely noticeable — especially when compared to others in the roundup. Although these monitors aren't cheap, they are every graphics professional's dream.

NEC PT90**Support For Resellers:**

Co-op advertising

Reseller referrals

POP displays

Three-year warranty includes parts and labor

Dedicated technical BBS

Tech line for tech information service

Volume Discounts: Negotiated with distributor**Does Our Availability:** Yes**Editor's Notes:**

With a 15.6-inch viewable screen and a 0.25-mm dot pitch, images

were sharp with vivid colors at any resolution. We were surprised to see how good the focus was when we switched it from 1,600 by 1,200. At this resolution, the monitor can handle a refresh rate of an exceptional 73Hz. The OSD is easy to use and offers a wide range of configurable options. There are five color temperature profiles, each one also being user configurable. This monitor is more on the expensive side, but if performance is your number one concern, it leaves little to be desired.

**Makia 447Kare****Support For Resellers:**

Marketing funds

Reseller referrals

POP displays

National advertising

Three-year warranty includes parts and labor

Dedicated technical BBS

Dealer-specific space on the Web site

Volume Discounts: Yes, depending on opportunity.**Does Our Availability:** Yes**Editor's Notes:**

The new model has a 15.5-inch viewable screen with a fine dot pitch of 0.25-mm. It is capable of super-high resolution 1,600 by 1,200 at 72Hz for super-fine images without flicker. Although at this extreme resolution we did notice some degradation in focus, it was only a

slight amount. At 1,280 by 1,024 the monitor produced excellent images and test patterns. Vertical refresh rates can go up to 150Hz when at lower resolutions for truly flicker-free displays. The on-screen display is configurable in seven different languages and is very easy to use. There are two custom color temperature profiles, as well as seven panel values. Because of the Trinitron tube, the two dumper wires are noticeable although no more so than they are on any other model with a similar tube. If multimedia and videoconferencing are something you're interested in, this monitor is made with them in mind. The 447Kare incorporates speakers, a microphone, and even a color video camera into the case.

**Philips Brilliance 100****Support For Resellers:**

Marketing funds

Reseller referrals

POP displays

Three-year warranty includes parts and labor

Tech-line tech support

Volume Discounts: Yes**Does Our Availability:** Yes, a 30-day loan**Editor's Notes:**

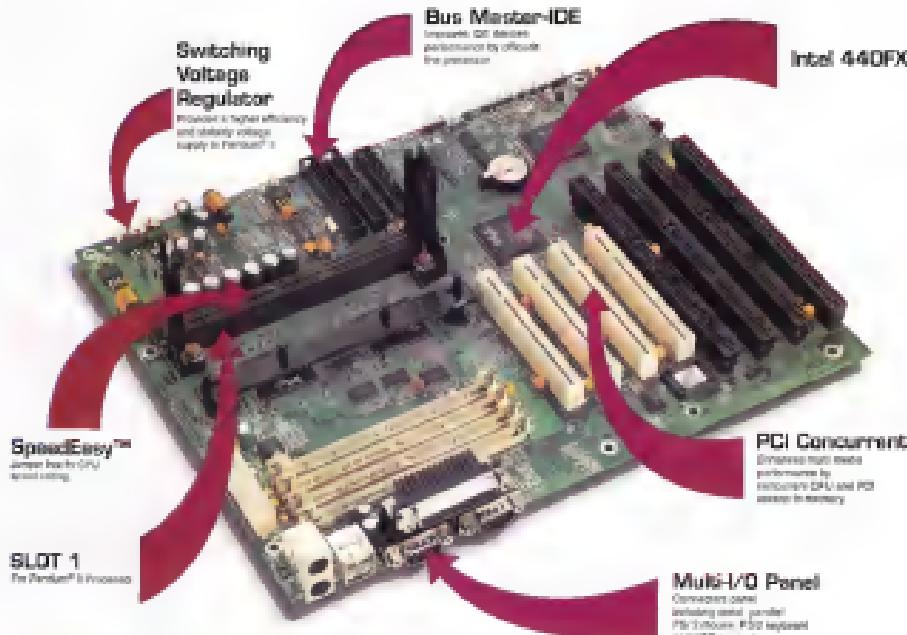
The Brilliance 100 features a 15.9-inch viewable display, a dot pitch of 0.26-mm and a maximum resolution of 1,600 by 1,200 at 60Hz

refresh rates of 70Hz are offered at 1,280 by 1,024 and 1,024 by 768. Test patterns on this monitor proved to be some of good quality overall, although there was a slight focus loss at 1,280 by 1,024 and above. The Brilliance 100 also incorporates a pair of speakers and microphones into itself for multimedia-ready applications. The peculiar model is also the only one in our survey that month which did not offer any on-screen controls. To make adjustments to the monitor, you must use the included Controlsoft software.



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Panasonic PM17***Editor's Notes:***

This monitor has a 16-inch viewable screen size which puts it near the top low in its class. It offers a dot pitch of 0.27-mm, and is capable of resolutions as high as 1,280 by 1,024 at a refresh rate of 60Hz. At 1024 by 768, however, it is capable of a solid 85Hz for sharp, flicker-free images. Built into the Pan-Media PM17 are a pair of 3W stereo dome speakers, the same ones which are incorporated into Panasonic television sets. A/c/b/c/b into the monitor is a microphone, ideal for presentation or teleconferencing. The on-screen

displays are versatile in any one of five different languages. These are two-point color temperature and one user controllable setting. Test patterns proved to be sharp with good color and contrast. The PM17 weighs in at 18.2 kg, and meets all MPR-II emission guidelines.

**Sceptre PTS4*****Editor's Notes:***

From a company well-known for making flat-panel LCD displays and desktop monitors, comes its latest 17-inch model. The PTS4 has everything your customers could ask for in a 17-inch monitor. To start off, there is the 13.6-inch viewable screen, with a dot pitch of 0.35-mm. Vertical refresh rates can go as high as 1,280x, with a maximum resolution being an extreme 1,280 by 1,024 at a solid 70Hz. The on-screen display will allow your customer a full range of configurable options with a choice of five pre-programmed hor-

izontals. The PTS4 managed to produce good quality images and sharp text and was able to maintain its focus very well up to 1,280 by 1,024. Resolutions beyond that should only be used for brief periods of time when required to view a larger image.

**TTX 7785S*****Reader Authentication:***

Application and authorization are required.

Support For Resellers:

Custom programs tailored to specific reseller needs are available. Three-year warranty includes parts and labor (first and second year parts and labor; third year — parts and labor, but no CRT).

Web site includes technical information.

Volume Discounts: Yes***Ships Day Availability:*** Yes, must be large on display for 48 days***Editor's Notes:***

The 7785S from TTX offers an excellent balance of features, performance and a competitive price. It features a viewable screen size

of 15.75 inches, with a dot pitch of 0.36-mm. Resolution is as high as 1,600 by 1,200 as supported at 60Hz, with support for up to 1,280x at lower resolutions. The patterns proved to be sharp and focused even at the extreme resolutions. Even small fonts were clear and discernible. The OSD on this model is very easy to use, offers a full range of configurable options including three color temperature points at 6,500, 19,000 and 31,000 Kelvin, each of which are fully custom configurable. For great performance at a competitive price, give the 7785S from TTX a second look.

**ViewSonic GT710/Uplighter V73*****Support For Resellers:***

Reseller software

Toll-free 1-800-to-Rosses

Three-year warranty includes parts and labor

Volume Discounts: Possibly for volume corporate accounts***Ships Day Availability:*** Yes, with some restrictions***Editor's Notes:******ViewSonic GT71***

The GT71 was designed to replace and impress upon the 1710 model (which was a top-seller for ViewSonic). Aside from being very aesthetically pleasing, the GT71 offers some excellent features comparable with monitors in a higher price range. With a full 16-inch viewable display and a dot pitch of 0.27-mm, sharp images are the norm for this monitor. Its maximum addressable resolution is 1,280 by 1,024 at 60Hz, but at 1,024 by 768 you get a solid flicker-free display at 85Hz without eye-strain worries. At lower resolutions, the monitor is capable of refresh rates as high as 160Hz. The on-screen display is clear and easy to use, with a multitude of configurable options. Test patterns were very clean and sharp, and focus was very

well maintained even at 1,280 by 1,024. The GT71 is TCO- and ENERGY-compliant, weighs 16.7kg and is covered by a three-year warranty.

Uplighter V73

It offers a good balance of features and competitive pricing. For starters, it has a 15.8-inch viewable screen with a dot pitch of 0.35-mm. In its lower resolutions, the monitor can provide refresh rates as high as 160Hz, although in its maximum resolution of 1,280 by 1,024, it is limited to 60Hz. The on-screen display is simple to use and offers several configurable options at the touch of a button. At a resolution of 1,024 by 768, the monitor produced superb images with vibrant colors. Fuzzy and blurry were maintained even at an extreme resolution of 1,280 by 1,024.



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Mitsubishi Diamond Pro STTDXM

Reseller Authorization:

Yes, under Mitsubishi's DiamondValk program

Marketing Support For Resellers:

Co-op advertising

Marketing funds

Reseller referrals

POP displays

Three-year warranty includes parts and labor

Volume Discounts: On a case-by-case basis.

Demo Unit Availability: Yes.

Editor's Note:

The Mitsubishi Diamond Pro STTDXM from Mitsubishi is the kind of monitor

you sit in front of and then don't want to leave. With a 16-inch viewable screen and a dot pitch of a super fine 0.22-mm, every image this monitor produces was nothing short of excellent.

Vertical refresh rates are available up to 120 Hz, with the highest resolution being 1,600 by 1,200 at 60Hz. We were surprised at how good the focus was at the extreme resolution. The OSD is easy to customize with a wide variety of configurable options. Although the two danger bars are fairly useful, it's a small price to pay for this otherwise exceptional monitor.



IBM G72

Reseller Authorization: Must be an IBM Business Partner

Support For Resellers:

Marketing support for resellers

Co-op advertising

Reseller referrals

POP displays

Education/training

Three-year warranty includes parts and labor

Volume Discounts: Yes

Demo Unit Availability: Yes, usually must apply.

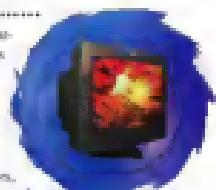
Editor's Note:

The company says the IBM G72 monitor offers excellent performance, leading-edge technology features and best-of-breed war-

mancy and support from IBM. It is targeted to business application users who require the productivity of a larger screen to handle many diverse or nested applications open simultaneously.

Editor's Note:

The G72 is available in two colors, either "pearl" or "smash grip," as listed by IBM. The G72 features a 0.28-mm dot pitch on a 15.7-inch viewable screen. The maximum addressable resolution is 1,280 by 1,024, although only at 60Hz. In lower resolutions, the G72 is capable of refresh rates as high as 120Hz. The unit weighs 17.7 kg.



Performance

Eizo FX-C4

Mitsubishi Diamond Pro STTDXM

NEC P750

These awards are given for new performance and overall features. This month, competition was very tight in this category, and as a result you are forced to hand out these awards to those that stand out from the competition.

The Eizo line of monitors are well known in the industry for offering incredibly sharp, vivid images without compromise, and the FX-C4 is a great example of the excellent image quality, super-high resolutions with great focus and grade A design are the makings of this monitor.

Last year, Mitsubishi won a performance award for its Diamond Pro STTDXM. Although that particular model is no longer in production, it has been replaced by yet another award-winning model, the STTDXM. While the DiamondPro title, the STTDXM offers stunning images at any resolution and offers a wide range of refresh rates up to 130Hz.

Nostragics to win this award, NEC monitors offer excellent design and functionality with features not easily matched by its competitors. Everything from a super-high resolution of 1,600 by 1,200 at 75Hz to a vertical refresh rate of up to 160Hz is found in this monitor.

Price/Performance

Sciptel PTS4

Without a doubt, the PTS4 from Sciptel offers the most bang for the buck. It features a small dot pitch, a resolution of 1,600 by 1,200 at 70Hz and vertical refresh rates up to 120Hz all at an incredibly attractive price from a leader in the monitor industry.

KDS VS-9

The KDS VS-9 is a monitor that offers great performance while at the same time bearing an extremely competitive price. At just a \$695 estimated street price, this monitor is capable of displaying images of high quality and extreme resolution found on other monitors with greater price tags.

Honorable Mentions

These go out to the Panasonic PT17 and the Nokia 443Kev.

The Panasonic PT17 is a great choice for an all-in-one monitor that features built-in speakers and a microphone and won't break the bank.

The Nokia 443Kev goes one step further to provide speakers, a microphone and a color video camera all under one roof. It's not cheap, but it sure is unique.

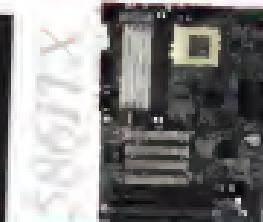
Steve Hinkley, Tim Raynor-Mills and Jay West are CCW's Lab Test Editors. The can be reached at (416) 433-6454.



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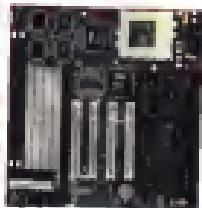
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Year 11 Review

DFI System Boards for accelerating new multimedia applications.

Point-Of-Sale Targets Huge Range Of Retailers

By Dan McLean

Point-of-sale (POS) systems are reaching down into literally every kind of retail and to all types of retailers. That wasn't always the way things were, however. A few short years back, discussions of POS systems were usually equated with big expensive Unix and mainframe-based hardware, and required large budgets to have the integrators who would do the installation.

Systems integrators did the installation and they all but ignored independent retailers, concentrating instead on the chain store giants. However, advances in PC technology have become the great equalizer for POS and now small retailers suddenly find they can actually afford to implement POS systems that can make their businesses run as efficiently as the big guys.

And DOS-based POS systems, which proliferated for more than 10 years and being usurped by Windows technology according to Peter Keane, of the Calgary Software Factory Ltd., all Calgary, makers of POS software for small business.

Because of the evolution of Windows 95 and (PC) hardware, DOS is slowly getting the boot because it's very difficult to support and to find new hardware to run DOS," he said. "Windows-based machines are becoming progressively cheaper so it's pretty well going to be the standard, I'm sure."

One December, for example, Pleasant Valley, Calif.-based CAM Data Corp./Viewpoint.com announced a new Windows 95

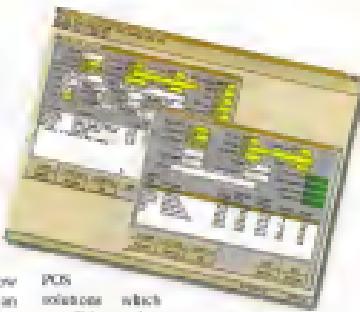
version of its CAM III software for retailers called CAM 95. The software now boasts a graphical user interface, with an Open Database Connectivity (ODBC) option to allow third-party software products such as Microsoft Excel or Access to read data from the CAM III database for reporting and data manipulation purposes.

Even large chain store retailers who previously used Unix-based POS systems are making the move to Windows technology, based on cost and hardware performance. Keane added, POS was previously an application for large customers who could afford it, but POS is moving on to down the retail business chain that even the cash registers we once knew are quickly becoming a thing of the past.

"Really the computer is taking the place of the cash register, or will be, I believe," Keane said. "But that's not here yet. You go to Safeway or Co-op and they still use electronic cash registers, but more and more they're becoming almost a hybrid — their cash registers are really just another data entry point for their mainframe systems."

The fact that POS software runs from standard PC platforms rather than specialized and proprietary hardware makes them a lot easier to set up, said consultant Richard Moresche, of Moresche & Associates Inc. in Toronto.

He explained most popular POS applications for smaller retailers tend to be general



POS solutions which are offshoots of general accounting packages. Customized features can be extracted through add-on applications, but the beauty of PC-based POS systems are that they are general, commodified solutions.

Large multi-store chains, in particular, look for customized options that relate to their specific requirements. Moresche cited the example of a clothing store that might want a POS inventory system that tracks stock by color, size and season. Retailers often use these POS solutions to decision support tools to determine when to place orders, seasonal items, styles or sizes on sale. Such systems might also serve as a means of tracking and administering business mailing lists.

"One of the key things is mail-in to reduce your stock outs — where someone wants to buy something, but you're out of stock — and to maximize [over-stocking] your slow-moving stock," Moresche said. "It's the management reporting aspect which can often make or break it for the retailer."

"These are not custom solutions, in the sense that they're created from the ground up. There are packages out there for clothing stores or other retail types. Again, for large installations, they generally take standard packages and add a few modifications to more closely dovetail with their requirements. Very little work is done on an entirely custom basis these days."

POS solutions run the gamut of retail. There are specific systems designed for businesses such as casinos, resorts, hotels, cruise ships, theme parks, corporate addresses, offices for large chain grocery stores, specialty shops, clothing stores, and just about any type of retail you can name. At the other end of the





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spectrum, POS systems for small business costs as cheaply as US\$99.95 for a product called Advanced POS from James Enterprises of New York Inc. Advanced POS leaves just about everything a small business needs in the way of POS, including cash register, accounting, inventory control and customer management functions. And all that's required on the hardware side is a 386 or 486 system on DOS, Windows 3.1, NT or Windows 95.

The POS software market can be characterized as broad, but vertical. According to Miossachev, POS system and application makers tend not to be the large software manufacturers, but rather a variety of niche players.

"There are many players in this business. I don't think it's the type of business where, say, a Microsoft could get involved and take over the entire market," he said.

The Calgary Software Factory (<http://www.cswf.com/cswf/pos.html>) is a good example of how specialized the POS market is and how much opportunity there can be. "We're a company that sells almost exclusively over the Internet," Keane said. "We have three employees and we try to keep the communication as low as possible in order to keep our price profitable and our overhead down."

The company's Windell Business Operating System addresses a variety of aspects of business, including:

- POS,
- invoicing,
- inventory control,
- customer and vendor tracking, and
- management reporting.

"Almost everybody [in the POS software market] these days has one little niche or item that they want to sell. We have to realize we can't be all things to all people. Our niche seems to be sticking out in the single-store operation, or two-to-three-store operations, who want very little custom work done. Our package is designed — even with the custom work — to be a decent price cheaper than a Unix-based system."

St. Albert, Alberta's Cade Software Inc. (<http://www.cadeplus.com/pbis/index/>)

offers POS functionality in its CashPro software, priced at \$199 for a multi-user version. Features include:

- cash management,
- inventory control,
- production and payment types,
- tracking of customers and salespersons,
- cash register features,
- double reporting,
- receipt printing,
- user-defined filters,
- tax calculations, and
- network support.

An example of a broad-ranging system can be found from POS International Inc.'s Power POS software, (<http://www.ultronix.com/power/>) which sells for US\$395. It includes handling of:

- accounts receivable,
- customer tracking,
- inventory control with multi-store tracking,
- sales, with both counter sales and quota sales, and
- employee timesheets.

Merkhau, Ont.-based Transx (<http://www.ultronix.com/transx.htm>) sells a variety of products under its "Intelligent" product line.

POS Xpress lets users capture data throughout the customer contact process to improve information gathering and to better target markets, says the company. POS Configurator lets users tailor that product to their own unique business needs. Store Manager provides in-store processing for centrally managed retail chains, offering POS services, calendar data backup, cash management, sales reporting, data entry, and inventory control. And, according to the company, TRANSx supports on-line or batch communication between any number of remote stores and head office, enabling credit and debt authorization routing, file transfers, price updates, program downloads, E-mail, and database inquiries.

According to Miossachev, POS applications can typically be divided into three categories: general accounting systems used for POS, POS add-ons that hook into general accounting systems, and complete proprietary POS applications aimed at particular markets.

Resellers typically sell shrink-wrapped POS accounting packages plus many of the add-ons. The more customized POS solutions

are typically sold and serviced by the package developer, sometimes with the assistance of a VAR, Miossachev said.

"If you only have 200 to 300 users [of your POS system] in the entire world, there's probably not much room for a VAR who just covers Ontario, for example. You may only get a couple of installations a year which wouldn't be enough to support you, unless they are very, very big installations."

Ingram Micro Inc. (Canada) in Toronto carries a range of off-the-shelf POS software that are typically generic products, according to company spokesperson Lynn Schaffer.

"Distribution tends to carry products that are just off-the-shelf, high-volume products," she said. "We may sell to VARs who then take and customize [these POS systems]."

However, she confirmed that the POS market isn't a huge opportunity for the distributor side since the market is so specialized and niche-oriented.

Keane agrees and added that many of the niche spaces are becoming increasingly crowded. "There are more and more companies coming into this market," he said. "I see them on the Internet all the time."

Some POS URLs:

- All Matrix: <http://www.allmatrix.com>
- Advanced Point Of Sale: <http://www.apos.com/>
- Cade Software Inc.: <http://www.ultronix.com/cade.html>
- Cash Data Systems: <http://www.cashdata.com/>
- Cobb Data Systems: <http://www.ultronix.com/cobb.html>
- Del West: <http://www.ultronix.com/delwest.html>
- InfoGistics: <http://www.infogistics.com/>
- POS International: <http://www.ultronix.com/power/>
- RIDMS: <http://www.ultra.com/>
- Transx: <http://www.ultronix.com/transx.html>
- Windell: <http://www.ultronix.com/windell/>
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Dan McLean is a Toronto-based journalist who specializes in high-technology reporting.

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DVD player sales are climbing

After six months on sale, and with the amount of software growing week-by-week, sales of DVD-Video players were still slow but growing, according to player makers. While no specific figures have been released by any manufacturer, estimates based on information from makers show that total unit sales in Japan are around the 150,000 mark. The latest data from Matsushita shows 214 announced titles.

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Hong Kong moves to restrict smart card use in transportation

Telecom firms, retailers and parking companies hoping to link up with the soon-to-be-launched smart card payment system for much of Hong Kong's public transportation may find their move blocked by the Hong Kong Monetary Authority.

According to the South China Morning Post, business companies have approached Creative Star, a joint venture by Hong Kong's five biggest transport companies, including the Mass Transit Railway Corp, Kowloon Motor Bus and Hong Kong Yau Ma Tei Ferry Co. The companies want their customers to be allowed the use of Creative Star's Octopus contact-less smart card to pay for goods. But Creative Star General Manager Brian Chambers said the HKMA had indicated it did not encourage the use of contact-less

smart cards to buy goods and services. The cards need only to be passed over a scanner to register payment, and smart card experts were concerned about the possibility of unintended transactions being recorded.

Hong Kong's big banks also may object to travellers buying goods and services with the cards, as this effectively allowed transport companies to act as banks.

In a recent discussion paper, the HKMA said that only financial banks should be allowed to issue cards that had no restriction on the goods and services they could buy. An HKMA spokesperson said it had not formed a firm view on the use of contact-less smart cards to buy goods.

"There is no black and white for this," he said.

Japanese Internet business is worth US\$245 million

The value of transactions made over the Internet in Japan in 1996 jumped 43 times that of 1995, according to a survey carried out by the Ministry of Posts and Telecommunications (MPT). The statistics showed, said the MPT, that over half of all cyber-businesses were operated by a single person.

In fiscal 1996, the value of on-line commerce in Japan was

US\$345.2 million, up almost 40 times over fiscal 1995.

The MPT said this gave Japan an eight per cent share of the world's on-line business market.

Around 40 per cent of the business posted profits or broke even, found the survey, and 60 per cent receive less than 10 orders per month, have less than US\$1,720 in monthly expenditure and less than US\$860 in monthly sales. The average monthly expenditure is US\$82,667. Findings showed that 90 per cent have a staff of five or less.

Alcatel to set up new multimedia centre

French telecommunications giant Alcatel Telecom is to set up its new regional multimedia centre in Malaysia in a bid to make Malaysia a media and entertainment hub for Asia, according to an Agence France-Presse report.

Alcatel general manager Gérard Dega said the new centre would be staffed with highly skilled engineers in multimedia and broadband and would be located with the new headquarters of Alcatel in Cyberjaya. He said the regional competence and support centre in Malaysia was for all multimedia networks that were, or due to be, installed in Asia.

Prime minister Mahathir Mohamad hopes the "garden city" Cyberjaya would become a Southeast Asian hub for multimedia and digital entertainment in Malaysia by bringing together top creative and technological talent.

In the meantime, Alcatel Telecom has signed a memorandum of understanding with University Teknologi, which has the task of setting up the Multimedia University in Cyberjaya. Dega said the partnership would include the sponsorship of scholarships and access to some of the most advanced research and training centers in Europe.

Alcatel Telecom, which has been a major contributor to Malaysia's telecommunications infrastructure, is a leading world telecommunications and space conglomerate. Alcatel Network Systems Malaysia, in the northern Penang state, is also helping Malaysia build high technology telecommunications systems through the manufacture of the Alcatel 9000 switch and establishing a software development centre. ■

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Dealers
Wanted

Dealers
Wanted

Focus! Focus!

by Sean Carrithers

Growing numbers of computer resellers are tapping into the World Wide Web. Many want to enhance their regular retail operations; some are aiming to provide a completely on-line method of purchasing. Still others are finding new revenue opportunities, by helping customers build their own business presence on the Internet.

The Web's dynamic. There are boundless ways to present a business, so focus is crucial. Here are two important considerations:

1. Does the Web site clearly convey what the business does?
2. Can the average visitor or shopper understand the site?

If you're going to invest time and money in providing a Web presence for your company, the pages should give some indication as to what services or merchandise your company provides. For example, contrast the intangible site for Orbis (<http://www.orbis.com>) with that of its parent company, Clearly Canadian (<http://www.clearly.ca>). While both sites have a good "look" to them, the Clearly Canadian site states explicitly what the company does on the welcome page, while there's hardly anything on the entire Orbis site to indicate that it too is in the drink business.

Obviously, this example is a little extreme, but it illustrates a problem that some Web sites have. If a Web presence is going to be a useful tool for a reseller business, it must get the pertinent information to the potential customer, and make clear what the business is about as quickly as possible. Name recognition isn't necessarily enough. A small write-up detailing what the business does, or a small product graphic, on the welcome page can be useful in quickly showing what the site is about.

Clarity is particularly important when you get into the specifics of what's being offered for sale. A lot of information is presented on the Web, but there's a distinct lack of useful specifics. For example, it's fine to list all the different models that you carry, but be very clear about what these models are. What are the differentiating features of the

various products listed?

Imagine, for a moment, that a customer has just walked in the front door of your store, looking for a new computer system. Without anything specific in mind yet, your customer is just plowing through the various options, to see what is eye-catching. You see them walking around, looking at system packages, checking out the individual components, looking down the aisle at monitors, modems, and assorted other pieces. What's your job, as a professional computer salesperson?

The traditional wisdom would go like this: Approach the customer as you spot them looking at systems. Ask questions to find out what they are looking for in a computer, and demonstrate and explain the various options. Describe the advantages and drawbacks of certain setups, depending on the customer's needs. Detail what components and software each system came with, explain what the components do and their specifications, and outline various changes or upgrades that could be made on that particular package. Essentially, take them step-by-step through the process.

Your customers should come away from the experience with:

1. A better knowledge of what they wanted from their computer system,
2. An understanding of which systems would be best for them, and,
3. A sense of satisfaction, as you have taken care of their needs.

On certain Web sites, precisely the opposite is happening. While shopping for a computer system over the Internet is by no way nature a less personal experience than heading down to a local store, there are certain things that can be done to add to the experience.

You don't have to add a lot of detail, but if you're going to put items up on-line, you should at least point out the major differences between items. Note which component is the processor and which is the monitor. Provide hyperlinks to the manufacturers' Web sites, where available. If there's information you can provide for clarity, include it.

What are your key Web messages?

How can you make it easier for potential customers to understand your business and buy your products?

It is your prerogative to assume that someone visiting your Web site already knows what all your model numbers are. However, that is equivalent to greeting an in-store customer at the door, handing them a bunch of paper signs with prices on them, and sending them back outside without letting them look at the actual merchandise.

A friend of mine was recently shopping for a more powerful computer. She went looking through resolution[®] Web sites to find something appropriate. She waded through a few sites, checking out systems. While most of the sites were fairly easy to navigate and understand, one of the sites she came across had this system description on it:

PCP210NTD16X/IMC/32MB/2GB/2MB,
VR/PQP
NT/PCP/ACC KIT
2GB 5400 RPM HD KIT (I)
2MB VIDEO RISER, PCP NT (I)
32MB DIMM (I)
PCPRO210NTD16X/IMC (I)
PowerCenterPro Accessory Box, U.S. (I)

It took me three hours and the assistance of three computer professionals to decode this little gem in its opacity. The frustrating part — this was about the most detailed information that was given on the site.

I'm not quite sure where cryptic priorities like the above got started, whether it be lack of space in print ads, or computer industry shorthand. But if you are running your site at the average consumer, assume they know such basics as: computer, printer and hard drive. But expand '16X' into '16X CD-ROM', 'Explain that 32MB is RAM and that 2GB means a two gigabyte hard drive.'

Getting customers to visit your site is important. But, please — offer focus and clarity, so they understand it too. ■

Sean Carrithers does Web consulting for **Anchors Aftersale Computer Services** (<http://www.anchorsaftersale.com>) in Brampton, Miss. He can be reached at seanc@anchorsaftersale.com.

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3 FDD & 4 HD



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Dealers
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Internet Flash Reveals Intranet Gold

By Greg Rabadge

The Internet opportunity for business may be big, but the intranet opportunity is huge. One analogy that has been used to describe the Internet/intranet paradigm is the iceberg: if the tip of the iceberg is the Internet, then the mass of ice below is the market for intranets.

Market research firm International Data Corp. estimates that by the year 2000, Internet and intranet products and services will generate more than US\$892 billion in spending. And when broken down, the future demand for intranet technologies will far outweigh that of the Internet.

According to Zona Research Inc., by 1999 spending on intranet technologies will be 700 per cent greater than Internet technology. Furthermore, the Gartner Group says that by 1998, 50 per cent of Fortune 1000 companies will have intranets.

The server market alone is expected to grow well into the billions by the year 2000. Beyond the hardware requirement of servers, there is a growing demand for firewalls to protect the network, server software and databases to run it and a host of peripheral software to magnify the features of the network. And this is just the beginning. Much of the technology used to build intranets is also being used to build external networks, often called extranets.

One of the central reasons for the intranet's success and the quick adoption of corporate intranets is that for most mid- to large-sized companies, the infrastructure needed to implement an intranet already exists — an array of desktop computers linked together by some form of corporate network, usually TCP/IP or IPX. In today's LAN/WAN environment, employees have access to company databases, product information, services, financial and other information. Integrating this information into one "non-stop" access point — or home page is the next step.

The growth of intranets stems from a movement in the market-place toward a standard network technology platform and from the R&D/knowledge power created for an organization. The growth and predominance of TCP/IP (endorsed as a standard by the Internet Technology Task Force) and the fact that 95 per

cent of American companies are still using legacy systems created a need/opportunity to integrate those systems.

Return on investment for intranet implementation has recently been estimated by IDC to be as high as 1,000 per cent. In addition, companies examined in the IDC study measured the cost of their intranet within six to 12 weeks. Therefore, given the momentum in the marketplace and a fiercely competitive environment, the most significant cost for businesses today is not implementing an intranet.

The widespread migration of legacy information and communication to a centralized system throughout the corporate world means that the demand for intranet technologies will continue to grow as more and more companies realize the potential and the necessity for such an internal communication system. Many medium and large businesses have some need for external communications — and a corporate intranet is becoming the most cost-effective and simple way to fill this need.

Through the simple point-and-click interface of a browser, employees are able to access information, run applications, collaborate on projects, communicate, search corporate databases or undergo computer-based training — all from their workstation. In some instances limited access to certain information on an corporate intranet is given to a company's customers via an extranet.

Intranet case studies indicate an exponential growth in both users and content on intranets which leads to another benefit/appointment — scalability. As more information is added and other features required (such as video-conferencing or audio streaming) more servers can be added to the system on an ad-hoc basis.

Intranet technologies are in the early 90s in a way to take the increasingly popular Internet medium. Like E-mail, the Web and newsgroups and bring them into the corporation. The first intranets resembled little more

than a merger of groupware products and Internet E-mail functionality. With the advent of the NCSA Mosaic browser and the Netscape Navigator browser, Web technology was born. Within two years, the number for the internal Web servers which form the core of corporate intranets jumped from zero to US\$45 million. According to Zona Research, two-thirds of all large companies are either developing an intranet or are in the planning process.

Which Companies Need To Implement An Intranet?

The following survey will help identify inexact opportunities:

- Does the client have more than one office?
- Is the client's business dependent upon technology?
- Is there a need to communicate within or across different company divisions or departments?
- Is the client's business knowledge-based intensive?
- Is the client currently operating on a number of different platforms or utilizing a variety of desktop technologies?
- Are the client's phone, fax, mail and couriers charges significant in relation to other business expenses?
- Are there more than 30 desktops within the organization?
- Is there a need to communicate to a broad stakeholder group?
- Is the client currently communicating electronically — either internally or externally?

If the client answered 'yes' to three or

"The future demand for intranet technologies will far outweigh that of the Internet."

bases or undergo computer-based training — all from their workstation. In some instances limited access to certain information on an corporate intranet is given to a company's customers via an extranet.

more of the above questions then the company will gain a significant competitive edge by implementing an intranet.

Be it a company's Web site, intranet or extranet, the inclusion of Internet technology is changing the way companies do business and will continue to impact the way people communicate and share information. What this paradigm shift means for reaction is an unparalleled opportunity for growth involving intranet/extranet technologies over the next five to 10 years.

Greg Rabadge is a business process analyst and consultant with Toronto-based *Hype Inc.*, an *intranet and browser development company* (<http://www.hype.com>). He can be reached at ggreg@hype.com.

Trio Of NT Books Provide Ranging Coverage

by Stephen Baraku

Title: Windows NT 4 and Web Site Resource Library
Publisher: SAMS Publishing

ISBN: 0-672-30885-3 / 0-672-30886-4 / 0-672-30884-3
 0-672-30889-0 / 0-672-30889-6 / 0-672-30884-7
 All the titles are contained in one package with
 morning case.)

Format: Six volumes, three CD-ROMs

Level: Beginner to advanced

Description: This book and CD bundle contains every aspect of NT 4 Server setup that you and your customers will ever need to know in one convenient authoritative package.

Rating: A+ — Highly recommended

Microsoft Windows NT servers are becoming and there is a substantial shortage of NT experts. The cost of NT education can be prohibitive for you and your customers, but the current market trends represent a unique opportunity for VARs and consultants. There are many books available — so which ones are the best?

For a well-written beginner's guide to Windows NT, check out New Riders' "Managing Windows NT Server 4," by Howard F. Halkler (ISBN 1-56205-576-3). The task-directed guide covers set-up, basic administration, user relationships and security. This book includes sections on:

- networking fundamentals,
- selecting and configuring hardware,
- network architecture,
- installing the NT OS, adding and deleting shared resources and printer resources,
- setting up and modifying user accounts,
- RAS and RAID volumes,
- working with the registry,
- NetWare and Macintosh compatibility and NetWare migration, and,
- domain trust models.

"Managing Windows NT Server 4" includes a CD-ROM-based Windows NT installation for performing common administrative tasks, a NetWare to NT translation index and a complete command reference.

Halkler's approach is gentle, carefully building key networking concepts before moving to more advanced material. The only caveat is that you often want more details, which the book does not provide.

For greater depth and more substantive coverage, network consultants will want to use "Using Windows NT Server 4," by Roger

Jennings (ISBN 0-7897-0251-7). The book gears itself towards experienced networking professionals and provides extensions to advanced coverage of planning, budgeting, installing, and managing single- and multidomain Windows NT networks. Together with the usual information on network installation, and administration, this advanced guide includes sections on:

- integrating NT with NetWare and Unix networks;
- connecting Win95, NT, Win3.1x, and Macintosh clients;
- setup and management of Internet Information Server, FrontPage, Internet Database Connector;
- installing and administering BackOffice SQL Server, Exchange Server and SMS server;
- RAID and tape backup strategies, and,
- HOBase-T, server clustering, design, optimization and troubleshooting techniques.

Be forewarned — this book targets a more advanced audience and assumes a good amount of computer expertise. It takes over where Halkler's book leaves off, especially when you are researching a particularly tricky problem.

Title: Using Windows NT Server 4

Author: Roger Jennings

Publisher: Que

ISBN: 0-7897-0251-7

Content: 995 pages

Level: Intermediate to advanced

Description: This book contains good coverage of setting up and working with Windows NT including fine-tuning and optimization.

Rating: A+ — Recommended for networking consultants.

For the ultimate in resource/reference material, SAMS' "Windows NT 4 and Web Site Resource Library" is unmatched in content. I strongly recommend this collection for all NT specialists. With six volumes and three CDs, the package full into the "Everything you ever wanted to know but were afraid to ask" category.

Specific volumes include "Windows NT Installation, Configuration and Customization," "Windows NT Internet and Internet Administration," "Windows NT Internet and Internet Development," "Windows NT Net-

Title: Managing Windows NT Server 4

Author: Howard F. Halkler

Publisher: New Riders

ISBN: 1-56205-576-3

Content: 1,085 pages, one CD-ROM

Level: Beginner to intermediate

Description: The book outlines the essentials of NT administration and setup.

Rating: B+ — Recommended for the beginner

working," "Windows NT and BackOffice Integration," and "The Windows NT Registry."

The three CDs contain more than 3GB of reference material, HTML hot-linked books (on TCP/IP, ActiveX and Web Development), materials on Java Security, software utilities including TUCOWS' "The Ultimate Collection of WinSock Software," and trial-versions of controls.

In summary, if you are new to Windows NT networking, "Managing Windows NT Server 4" by Howard F. Halkler is recommended. This book introduces the networking field and NT servers in particular.

For the experienced networking consultant using "Windows NT Server 4" by Roger Jennings is a good choice. This book is superior to Halkler's but would be difficult to follow without an extensive networking background. If you want a one stop source for all NT information than "Windows NT 4 and Web Site Resource Library" by SAMS Publishing is necessary. For IT-networking, installers, administrators, and experts. The question here becomes one of cost, although the amount of supplied material is well worth it. The CDs alone could easily justify the investment.

One final thought: computer books usually in lag the market-place and so you should not expect the latest releases or patches to be covered. To provide some measure of protection, all the books reviewed above contain Web links that you and your customers can use to download the latest news, patches and updates. ☐

Stephen Baraku, BIP, is co-chairman of the BADM Computing Program of Capilano College, which is CPS. Novelty, Microsoft-certified. He can be reached at sbaraku@capcollege.ca

Marketing On A Shoestring

by Cathy Cosean

"For many resellers, huge campaigns are not in your best interest when you are only servicing a specified region or certain 'niche' market."



Contrary to your accountant's opinion, marketing is a necessity — not a luxury item. To truly maximize your business's potential you need the widespread visibility that marketing generates. The reason behind marketing is simple — people can't buy from you if they don't know you exist.

"Visibility" does not automatically equate with big bucks and international marketing campaigns. In fact, for many resellers, huge campaigns are not in your best interest when you are only servicing a specified region or certain "niche" market.

The key to effectively increasing your visibility is determining your target market. Who will buy your products and services? Where are you going to make the most money with the least amount of effort? Which industry applications are best answered by your product offerings? What are the advantages and limitations of your staff? If you know you only have the ability to properly service clients within a 75-square-kilometre area, and your particular products and services best lend themselves to graphics firms, then you should be focusing your marketing efforts on these individuals. Once you've created some visibility for your company with these companies, then you can expand your target market — for example, to include companies within 75 to 100 km, or perhaps the financial industry.

After establishing your target audience, the next logical question is, "How do I make these people aware of my company?" There are numerous ways to promote your company without spending millions of dollars, including your basic "word-of-mouth" and "networking" approaches.

However there are also some cost-effective marketing activities that you can proactively initiate to generate widespread visibility in your target markets.

Speaking Opportunities

Speeches are a great opportunity for you to gain some visibility in your community and meet some new prospects at the same time. Many local organizations — including the chamber of commerce, user groups and trade shows — are on the look out for people to shed light on new technologies and solutions. Offer takeaways after your speech — such as an informative brochure or article, with your business card stapled to it, so prospective clients know how to get in touch with you.

Sponsorships

A multitude of organizations and events are always looking for money in return for "free advertising." Again, which events or organizations you sponsor will depend on which markets you are targeting. Sponsoring your local arts night might be a natural fit if you're targeting the graphics arts market, but you might be better off to sponsor a school event if you're targeting the home market.

Donating equipment to a worthy cause can also gain you some great exposure — be sure to tell your local community paper so they can write an article about your generous donation as well!

Advertising

Advertising does not necessarily assume you to mortgage your house. Advertise in technology or business publications if they can help you reach your target regional or industry target markets. If you're aiming for the graphics market, think about advertising in a graphics publication. Or if your geographic region is small, try advertising in your community paper. Classified ads can also be an inexpensive, yet effective, place to advertise if you're targeting SMBB buyers.

Training Seminars

A great way to generate attention for your company is to hold an event. Invite a few of your targeted prospects to a training or information seminar held at your offices.



Providing a value-add right at the beginning of your relationship can demonstrate how dedicated you are to customer service — a determining factor for many buyers. Or, if you have the capacity for many attendees, consider advertising the seminar with flyers or ads targeted to your established target market. Don't forget to invite your local media to encourage some newspaper coverage of your event as well.

Sales Letter

A cost-efficient alternative to direct mail, a sales letter is quite simply a well-written letter designed to introduce your company, products and services and to promote yourself to your target market. After you've written it, and had it edited by one of your colleagues to ensure it reads well, send it to your entire list of targets.

If product brochures are available, include them with the mailing or additional information. You should plan to distribute sales letters to your list on a regular basis — but make each letter different to present prospects with some new information with each correspondence.

Ask your partners to contribute to the overall costs associated with some of these marketing suggestions — many large vendors offer their partners funding to help you sell more of their products.

Marketing, if done smartly and efficiently, does not have to cause your accountant any grief — except for the work of calculating the revenue growth and deciding what to do with the profits! ■

The author is a senior coordinator with the advanced technology division of Sandwick Canada/Continental Communications, a full-service public relations firm with offices across Canada. She can be contacted at ccosean@sandwick.com

Clone CPUs Challenge Intel At Both Ends

By Alan Zisman



Once upon a time, choosing a CPU for a PC was simple, relatively speaking.

Intel's product line included the newest, hottest, and most expensive processors, along with a range of older offerings — lower priced, lower performing, but guaranteed compatible. Other companies, most notably AMD and Cyrix — but also IBM, Texas Instruments, NEC and others — offered low-priced, low-end equivalents that were often souped-up clones of Intel's previous generation, providing good performance for the price. These were rarely found on name brand rigs, or in big business's machines, partly out of fears of potential incompatibility.

This pattern has held true through several generations of PC processors. When 286s were hot, NEC offered the high end of the low end, powering turbo-XCs that were faster than any powered by Intel's previous generation. As Intel pushed its 386 series, AMD and others sold 40MHz, 48MHz, and 50MHz 386s that rivaled the performance of a low-end Intel 386. Later, AMD similarly offered 40MHz 486s that could keep pace with Intel's more expensive 486/25, and more recently, above 486/100s that kept pace with the previous season's Pentium™.

The New Scenario

Things are more interesting now.

Users are faced with a wider range of choices than ever before from Intel, and with some very competitive alternatives from Intel's competitors. From Intel, one can choose between:

- the classic Pentium series, raised out at clock speeds of 133MHz, with major price reductions expected;
- MMX-enhanced Pentiums, at speeds of 166MHz to 200MHz;
- Pentium Pros, also at speeds of 166MHz, and,

• the new Pentium II CPUs, (previously code-named Klamath) with MMX enhancements and speeds starting at 213MHz with some models pushing 300MHz.

From the others, we're seeing releases of high-end models like:

- AMD's K6 offering the power of a Pentium Pro with MMX enhancement, but without that processor's incompatibility running Windows 95;
- Cyrix's brand-new 6X86MMX, formerly known as M2, along with its MediaGX processor aimed at low-cost models, including Compaq's Presario 2800. Current MediaGX models run at 120 and 133MHz, but Cyrix is planning to ramp the speed all the way to 200MHz by year's end. Cyrix claims its 6X86MMX processors rival Pentium II power at about half the price;
- Upcoming releases from new-to-the-CPU battle — Integrated Device Technologies (IDT), aimed at the low end market; and,
- The hottest competition is between the new generation of CPUs — Intel's Pentium II vs. the K6 and M2.

Pentium II Quandaries

At the heart of the competition is a key question of design. With the Pentium II, Intel has broken with the design used in its previous CPU models. This CPU is no longer socketed onto the motherboard. Instead along with its cache chips, it resides on a special card, fitted into a companion slot. That entails some major motherboard redesign, and causes manufacturers to fall-in-line standards.

While offering performance on par with Intel's high end, the clone CPUs are both designed to be compatible with existing motherboard designs using the Pentium's Socket 7 — a benefit for smaller motherboard manufacturers.

The obvious believe that Intel is trying to push the industry towards expensive and unnecessary new proprietary standards, while the Socket 7 still has a lot of life to it. Intel



counters that its designs are the wave of the future. But that's a catch — current shipping Pentium II machines are being forced to use an older supporting chipset (the 440BX), which is a drag on the CPU's potential. The 440BX doesn't even support some features available for the less-powerful MMX Pentiums, such as 8MBAM memory and the ATA-133 bus for faster disk access. As a result, early users of 300MHz Pentium II systems have found much lower overall system performance than they'd expected. The new 440LX chipset supporting higher bus speeds and Accelerated Graphics Port, among other features, won't be widely available until the end of 1997. With the new chipset, Intel hopes to push bus speeds to 100MHz and CPU speeds to 400MHz during 1998.

Don't be surprised to notice TV ads featuring "Intel Inside" based notebooks. For the short-term, expect to see:

- Cyrix selling to the low-end, such as less-known brands aimed at the U.S. mid-order market and to some notebook manufacturers, attracted by the lower power demands of its CPUs;
- AMD making some strides into the mid-priced market, with a few name brand manufacturers including these CPUs in their product line, and some penetration into the big corporate market, too;
- Intel keeping a strong hold over the bulk of the market;
- In the next issues, we'll look at these CPU lines in more depth. ■

Alan Zisman is a computer journalist and teacher living in Vancouver. He can be reached at a_zisman@cyberwave.ca

For Some, The Channel Is Not Working — But Why?

by Graeme Bennett



One of the overwhelming themes observable at Comdex/CanaCom '97, aside from an apparently endless array of digital cameras and the emergence of DVD as The Next Big Thing, was the inescapable sensation that, for many, the channel has failed.

Five points to consider:

1. Quality dealers often can't compete on price with resellers. Customers can buy products cheaper elsewhere.
2. Customers don't trust many computer salespeople, and often for good reason.
3. Channel-oriented manufacturers (and that's what Comdex is) are, for a growing number, not a worthwhile investment.
4. Distribution plays an increasingly more important role as growing numbers of dealers resort to subleasing software from software and value-added bundles designated "not for sale without hardware purchase." Increasingly, smaller dealers import academic editions of leading titles like office suites, graphics apps and utility packages. Others

resort to the grey market, arbitraging, exchanging warranty cards and other dubious activities that often end up derailing customer relations as warranty and service issues escalate.

5. While many resellers are still trying to make Web sites pay, a few have struck upon the right mix of form and function to see their Web-based sales efforts, pay off.

At Comdex, distributor events such as co-shows of distribution giants Ingram and Micro, and the absorption of IBM, Compaq and Apple, added weight to the presence of exhibitors such as Dell and Power Computing. Dell, of course, has done nearly all the right things. The company reportedly sells \$100,000-worth of product per day in its Canadian Web site (not to mention on the often quoted US\$1 million per day the U.S. parent is said to make in its site). And, aside from a string of quality-control problems that have dogged Power Computing, that company is apparently employing much the same strategy. That Web-complaint-order approach has allowed both to gain unique and high profit positions in their respective categories.

Consumers and corporate buyers didn't go to final-order sales fairs first. Statistically, the average networked computer purchaser is on his or her second or third upgrade cycle and, in many cases, they've seen both the small dealers and the resellers let them down. In addition to pricing issues, systemic problems such as rebased demo models, missing cables, and other aspects of poor quality control are what drove many buyers from the small dealerships into the impersonalities of the floorshow. There, they found salespeople not only usefully indoctrinated on the dizzying array of technical information required to effectively serve a sophisticated computer systems purchaser, but the deals with the devil — the kickbacks, splits, commissions, limited-market product bundles and other behind-the-scenes product plays of the dealers served to destroy a further degree of trust. In desperation, paid users turn to the producers' last process and pre-arranged predictability of the Dell's and Power Computings of the world.

One of the best booths in the show was one assembled by Toronto-based digital video specialists Viztek. The booth was festooned with literally thousands of products presented in a hands-on environment that allowed customers to compare, for example, the release menus of digital cameras from several manufacturers in a side-by-side comparison. This is the way consumers shop, it makes the most sense as a sales strategy. Viztek offered product brochures and catalogs that were both attractive and extremely informative, and provided what seemed to be a glimpse of the true soul of the company. The technical experts were there, demonstrating (and selling) complete solutions in a tightly focused and generally high margin product category.

While it may be true that multilevels is what the computer world perceives when there's nothing else happening, it is enjoying considerable interest right now. Those who can pull the right pieces together stand to reap the rewards. ■



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Graeme Bennett is Managing Editor of *The Computer Paper* and a former computer retailer based in Vancouver; he can be reached at grae@wipps.ca.

Use Internal Financing To Your Advantage

by Douglas Gray



As a retailer, you are constantly dealing with cash flow challenges. It's the nature of the business. Sometimes you need extra funding for seasonal inventory, special promotional demands or for other reasons.

Many business owners who are unable to access money or sufficient money, in terms of debt or equity capital may be forced to reassess their needs, resources, and business management. For example, quick handling of accounts receivable, effective inventory control, customer pre-payments, and cutting down on unnecessary expenses can free up funds not otherwise available. It forces your business to operate in a more efficient fashion. This will lessen your need to look outside the business for financing.

You may already be effectively using the following techniques. If not, a review will reinforce your positive managerial style. If you are not applying some or all of these methods of internal financing, they are worth considering. Here is a brief overview of some of the options:

Customer Prepayments

A business can encourage customers to make a deposit, prepayment, or payment on delivery. This is a very common technique in the rush-order business, of course, or where special or customized orders are requested.

Inventory Control

Effective inventory control will ensure there is the right amount of stock to satisfy customer demand. Determine guidelines for proper inventory purchases. Adjust your purchases to meet the peaks and valleys of your annual business sales. Too much money tied up in slow-moving inventory debt-service payments on inventory loans and lost customer loyalty due to insufficient stock are costly to your business.

Collecting Receivables

Receivables can be reduced by tighter credit granting policies, better monitoring of

accounts, and more effective collection policies. You may wish to consider credit cards or cash only as a means of sales.

Delayed Payables

Establishing a good working relationship with your suppliers can result in extended payment terms. Make certain they are aware of your loyalty to that firm and your repeat business. You may be able to negotiate a discount or further discount on volume or regular purchases.

Restructuring Payment Arrangements

There are times when a small business is not able to maintain monthly payment plans, or loan or repayment to creditors. By using creative repositioning techniques there are ways of getting around short-term positions.

Some alternative repayment plans that you may consider include:

- A period of grace for principal loan payments during the start-up period of your business operation;
- Blended payments that feature a long amortization period resulting in low payments of principal in the early years;
- Graduated payments — that is, low payments on principal in the early years and higher ones later on, and;
- Payments of principal during the high season only, so that the business does not have a cash tight period during the low sales volume season.

Selective Product Lines

Try to limit your product lines to the ones that suppliers give you the most favorable terms on and which have the highest sales turnover and profit margin.

Fixed Assets

You may wish to sell your assets to a leasing company and lease them back, thereby freeing up cash for working capital purposes. On reviewing your assets, you may find that some of them are not necessary to the business and may be sold to free up additional cash.

Renting or Sub-leasing

You may decide to rent space for your retail location, rather than buying. Naturally, this will enhance your leverage and your cash flow. Possibly you could sublease some of your existing space to a non-competitive but complementary retailer. By subleasing space you can offset your monthly payments, thereby increasing your working capital. These could also be cross-marketing benefits with increased sales to you.

Stringent Management

By reviewing the points discussed above to determine how to conserve on capital and save on expenses, financial resources can be freed up and the business risk minimized. You should analyze the financial condition of the business on an ongoing basis. For example:

- Are salaries too high?
- Am you taking out too much from the company for personal earnings rather than keeping it in the company for working capital?
- How do the company's costs of goods and other expenses compare to other companies in the industry?
- Is the lease too expensive?
- Are supplies being wasted?
- How do actual expenses compare to budgeted expenses?

You know best where expenses can be trimmed from the operation. In addition to controlling expenses, you should always be looking for ways to increase profits, utilizing inventory or assets, and initiating an effective receivables collection program. ■

Douglas Gray, LL.B. is a Vancouver-based lawyer in business, sports, real estate and author of 12 best selling business books plus a real estate investment software program. His books include *The Complete Canadian Small Business Guide and How-To Kit: The Canadian Home Based Business Guide* (both by McGraw-Hill Ryerson), *Start and Run a Profitable Consulting Business and Marketing Your Product* (both by Self-Counsel Press).

new PRODUCTS

CD-ROM is for notebook PCs

Most notebooks currently in operation have an internal CD-ROM drive, a situation that is increasingly problematic to users, as fewer and fewer software titles are available on floppy disks. Rather than buy a new, fully multimedia-capable notebook, many consumers are looking to upgrade their systems with an external CD-ROM drive.

DeKalek III-based Micro Solutions Inc. has released the new Backpack Banister, an incredibly compact, sleekly designed CD-



and floppy and hard drives. For more information, contact <http://www.microsolutions.com> or call 1-800-880-7227.

ROM drive that connects to a computer via the parallel port. The Backpack Banister is designed as a plug-and-play installation; simply connect it to the parallel port of any Windows PC, and then plug a power cable to the back of the Backpack Banister. The drive is rated at up to 1,200KB/sec. on its enhanced Parallel Port (EPP) speed, or slower on unidirectional or bi-directional ports (between 100 and 330 KB/sec.). The drive weighs 1.8 ounces, and has dimensions of 10.6x1.6x5 inches. The base model of Backpack Banister has a Canadian retail price of \$369. A version with built-in stereo sound capability costs \$469. In addition to the new Backpack Banister, Microsolutions also manufactures other parallel port mass storage devices, including an 10GB tape drive, a 650MB PC/CD drive, and enclosures.

Protec WebShare allows

multiple PCs to share Access
Quebec's Protec Microsystems Inc. has released the latest version of its WebShare product, which allows up to three PCs to share one modem, phone line, Internet account and IP address.

According to Blanca Nova, marketing manager for Protec, "Small organizations have embraced the WebShare concept because it beats the high cost of multiple Internet accounts, and now with this new release supporting higher speed modems, users can be even more productive. But, while the new WebShare is faster than the previous version, getting started is still simple. Just connect WebShare to your phone line using the model with integrated modem, connect up to three PCs to the WebShare using serial cables provided and instantly gain Internet access to these users."

The base version of WebShare, designed to be used with an external modem, has a suggested retail price of \$345, and is aimed at the SOHO market. For more information, contact <http://www.protec.ca>, or call 1-800-161-1156.



Protec WebShare

Nintendo 64 competing with powerful PCs

The Nintendo 64 video games console, an interactive 3D gaming system based on Silicon Graphics MIPS RISC chips, has become the best-selling video game system in Canadian history, with more than 300,000 units sold here in only eight months.

At a time when PC game technology is also developing advanced 3D graphics, the Nintendo 64, which retails for less than \$300, offers the grassroots, instant 3D rendering in the consumer market. Developing games for the Nintendo 64 is a difficult and expensive task, as it requires high-end Silicon Graphics developer workstations and open-level 3D animators and programmers. As well, the N64 uses ROM cartridge technology, instead of the more common CD-ROM discs common to most current multimedia systems. This means that for many developers, developing on the N64 is more of a financial risk than they care to assume. The upside, though, is that developers who commit to the N64 platform tend to be the best and most technically capable in the games software industry, and most of the existing N64 games are held to be first rate. The future is true on the PC, the vast majority of CD-ROM titles range from mediocre to bad in quality.

Many households with PCs have resorted to buying N64s as a "second entertainment system," since it can take up the "real" computer for home office and school work, for about a tenth of the cost of a complete PC system. Nintendo representatives claim that about 40 N64 cartridge titles will be available in Canada at time for the holiday season this year. CCW had an opportunity to test the latest N64 title launched this summer, Star Fox 64, and found it to have excellent game play, along with beautifully rendered 3D environments. Upcoming titles include Tetrisphere, a 3D version of the popular Russian Tetris game, developed by Canadian developer HDO, and GoldenEye, the Rare Ltd. adaptation of the James Bond movie.

For more information, contact 1-800-279-1600. ■

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Microsoft Canada GM promoted

Jeff Dewart, general manager of Microsoft Canada Inc. since August 1996, has been promoted to Microsoft Corp., in Redmond, Wash. (The specific promotion had not yet been announced at press time.)

Microsoft says the Canadian subsidiary grew 23 per cent under Dewart's direction. Dewart is chairman of the board of directors of Give in Kind Canada, a charity for product philanthropy. He is a member of the Advisory Board of the Queen's University MBA for Science and Technology program, and was president of the Canadian Alliance Against Software Theft (CAAST).

Microsoft said a separate announcement will be made about the appointment of a new general manager. In the meantime, Microsoft Canada's Strategic Management Team will manage Canadian operations, reporting directly to Frank Clegg, Microsoft Corp. vice-president, central region.

Matsushita names CEO

(NBL) — Matsushita Electric Corp. of America has announced that Yoshikazu Kubo, 58, has been named its chairman and CEO.

Kubo is a member of the board of MELCO parent company, Matsushita Electric Industrial Co. Ltd., and is responsible for Matsushita's overall operations in North America.

The company says Kubo joined Matsushita Electric in 1982 after graduating from Japan's Sophia University with a degree in law. He has held executive positions in Malaysia, Japan and the United States.

Tandem appoints VP

(NBL) — Tandem Computers Inc. has appointed former exec with Newbridge Networks, Doug Wheeler, to the position of vice-president, corporate marketing.

He will report directly to CEO Rod Paper.

Wheeler will be responsible for crafting and managing Tandem's corporate image in the market place.

Before Newbridge/US Networks, he was at Unix System Laboratories and Bellcore/AT&T.

In his position as vice-president of marketing at US Networks, he oversaw all corporate

marketing, including marketing programs, competitive analysis, marketing research, advertising, public relations, and analyst relations.

CAIP elects executive

The Canadian Association of Internet Providers (CAIP) — a non-profit alliance of 30 companies in Canada's Internet industry, has elected a new executive board. Margo Langford, from Sisec Internet Inc., was elected chair of CAIP. Other members of the board include vice-chair Bill Hall (Epsilon Internet Corp.), secretary Bill Neal (BC Tel), and treasurer Scott Kasperian (Bell Canada).

Last November, CAIP announced the development of a voluntary code of conduct for the organization's members. The organization plans to work on issues with government, and to represent the Canadian Internet industry to international Internet standards bodies.

Merisel Canada names VP

Merisel Canada Inc. has named Jamie McClelland as vice-president of marketing for the company.

Coming from the packaged goods industry, McClelland will bring a different perspective to the position and will apply some of that packaging knowledge to Merisel's operations, said Merisel Canada president Tom Reaven.

Adobe loses vice-president

(NBL) — John Brandon, vice-president and general manager, North America sales and support for Adobe Systems Inc., has resigned, after 10 years with the company.

He will become CEO and president of Academic Systems Corp.

Adobe says Michael R. Feltus, vice-president of customer support, will take over his responsibilities or, in some cases, until the company finds someone to replace Brandon.

According to the company, Brandon "gave the North American application sales operation significantly and overseas the smooth transition" in Seattle from Aldis Corp. to Adobe when Adobe acquired Aldis in 1994.

Microsoft gets new CFO

(NBL) — Microsoft Corp. has named Gregory B. Mello, CFO. He replaces Michael W. Brown, who will reportedly leave at the end of the calendar year.

Mello has reportedly served as vice-president for corporate development since 1996 and as treasurer since 1994. As CFO, he will be responsible for the company's worldwide finance organization.

Brown joined Microsoft in 1989 as treasurer, and was promoted to vice-president for finance and CFO in 1993.

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Oct. 7-8

Comdex/BC '97

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Toronto

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Nov. 12-13

Home-Based &

Small Business

Information Expo

Toronto

<http://www.skyline.ca/homebased.html>

Nov. 17-18

The CFO Summit

Toronto

(416) 599-9733

Nov. 27-28

Comdex/Fall '97

Las Vegas

<http://www.comdex.com>



Do you have an upcoming event you'd like to see listed in CDP's Calendar? Email: calender@cdp.ca

Time

by Douglas Alder

"I hit 40 years old this year, and for me it is a time for introspection and thoughts on how I plan to spend the rest of my time on the planet."



The party's been great, but it is time for me to go.

I will be ending my term as president, publisher and editor at Canadian Computer Paper Inc. as of Sept. 30. We have a new publisher, David Raine, who will be appearing from Toronto [the balance is restored, the universe is whole again].

I have been working with David to transfer some of my knowledge and ideas for future growth. He comes to the job as a seasoned publishing executive with more than 17 years of marketing, sales and general management experience with Maclean-Hunter Publishing and Bantec Publications. He has hit the ground running and although some days his head is spinning with all the new things to learn, he is absorbing quickly what is needed to keep the company going and growing. His mandate is to continue the successful growth we have experienced and to "export the revolution." (You can contact David Raine publisher@tcp.com.)

My Reason For Leaving

In 1985, Canadian Computer Paper Inc., the company I started almost 10 years ago, was purchased by Montreal-based Hebdô Mag Inc., the world's largest publisher of classified-of-fair publications, with publications in Canada, the United States, France, Holland, Sweden, Italy, Switzerland, Poland,



Russia, Taiwan, Thailand and Puerto Rico.

An added note of you know, when I originally sold the company two years ago to Hebdô Mag Inc., I was given a two-year management contract. That contract is now up, and I feel it is time to move on.

When I said, I did so with a view to spending more time with my family. I plan to travel with my wife and our four children. Our kids are home-schooled and so this will be one big geography lesson for them. We would like to see some of the world before they get too old and branch off on their own. We plan to travel for at least two years, before considering any new projects.

I have enjoyed my time with the company immensely and love the work that we have been doing, but I hit 40 years old this year and for me it is a time for introspection and thoughts on how I plan to spend the rest of my time on the planet.

My wife Kathryn and I started *The Computer Paper* in Vancouver in 1988, and expanded the publication into a cross-Canada publication, with editions that provide coverage for Vancouver, Calgary, Edmonton, Saskatoon, Regina, Winnipeg, Toronto, Ottawa, Montreal and Halifax. Along the way we purchased *Toronto Computer*, *Computer Player*, *Canadian Computer Wholesaler* and *Government Computer*. We also launched *Quebec Money*! and *Ontario Computer!* in the process. With 11 different editions and a circulation somewhere over 640,000 copies a month we can lay claim to being Canada's largest computer publishing company — not bad growth for 10 years. I am happy with where I am leaving things. I feel I have achieved some of the goals I set out for myself or saw along the way.

Our Oscar Speech

We would like to thank the many people who have brought the company to this

point. Obviously the staff at Canadian Computer Paper Inc. have been key to the development and success of the company. You can read the masthead of our magazines to see the names of the 75-plus people who make it all possible each month.

We would like to specifically name some people who have been key to the long-term development of the company. John Oliver, national sales manager; Hem Singh Khalsa, associate publisher in Vancouver; Patricia Fitzgerald, marketing manager and associate publisher in Calgary; Suzanne Fitzgerald, Winnipeg manager; Jerome Beaton, managing editor; Christine McPhee, corporate controller; Thao Wong, operations manager in Toronto; Elmer Marchison, associate publisher for our Eastern Edition; Janice Leighman, western key account manager for CCW and Judy Pringle, associate publisher for CCW.

We would also like to thank our many long-time and loyal advertisers who have made the journey possible. Finally, we think you the readers who keep reading, keep using the magazine as a source for your purchasing and keep telling advertisers you saw their ads in our publications. Oh yeah, we would also like to say thanks to our Moms and Dads.

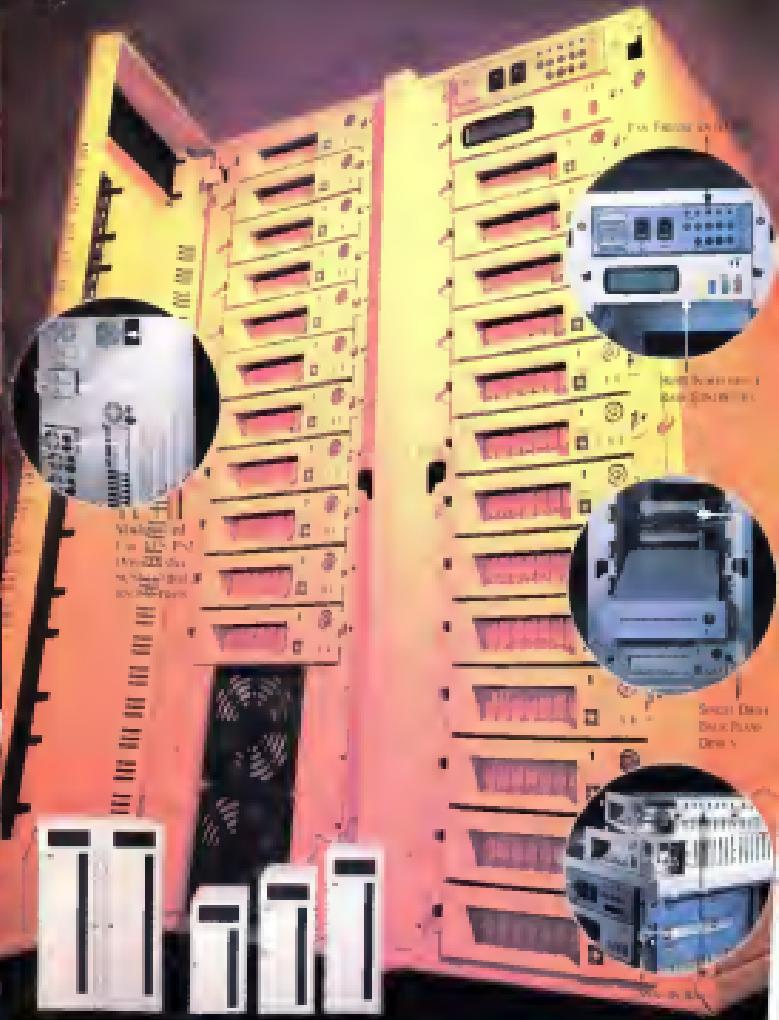
One More For The Road

You will probably get at least one more column out of me before I leave on our round-the-globe trip. The management of Hebdô Mag has asked me to send a postcard or article once in awhile from the road, so don't be surprised if my smiling face shows up on occasion from some far-off place, with an update on global computing.

Enjoy the issue. **TA**

Douglas Alder is Publisher of Canadian Computer Wholesaler. He can be reached at publisher@tcp.ca.

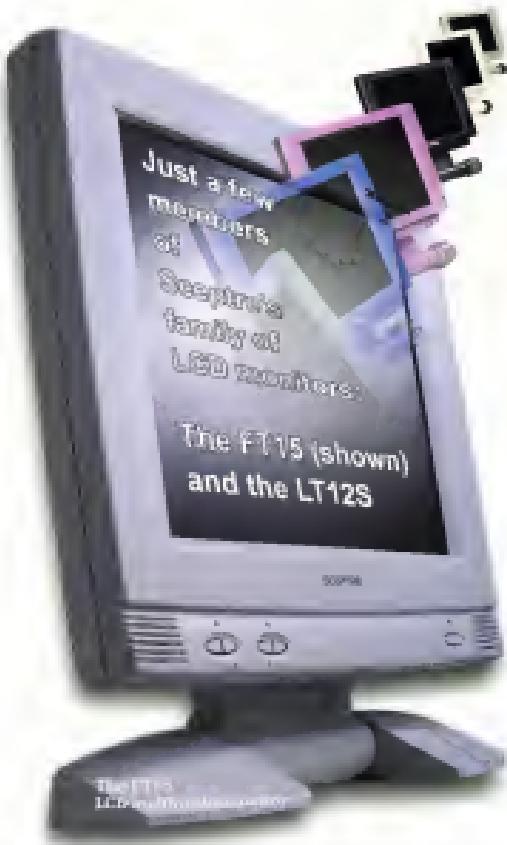
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Larry Merrill, Vice President, ABB
Encyclopedic Division

"I reviewed a few different flat panel monitors. Sceptre was the best in terms of dimensions, features, and lack of interference. It was also the most reasonably priced. It was a pretty easy choice."

Richard Powers, market research consultant
Mythic Ages Research

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